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LOGISTICS SERVICES IN THE CHANGING BUSINESS ENVIRONMENT IN WESTERN RUSSIA

Case Itella

Pro gradu -tutkielma
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Logistics services in the changing business environment in Western Russia - Case Itella

ABSTRACT

Today increasing number of companies outsources their logistics functions to a logistics service provider in order to focus on core activities of the company. Thus, it is important to match service offerings with the needs of the customers. In addition, often the business environment factors affect the logistics service purchasers' needs for services. What is more, especially an evolving business environment creates boundaries for service offerings. Such evolving and challenging market is Russia, whose economy is booming and the need for logistics services is remarkable today. However, entering Russian logistics market is not a simple task: an evolving market has its own challenges. The objective of this study was to create a framework in order to specify these possibilities and challenges that the Russian emerging market involves from the logistics service provider's point of view. Moreover, the objective was to track the basic and value-added logistics services that are appreciated by logistics service users in Russia.

This study presents a qualitative framework for analysing logistics service needs. The framework integrates the components for analysing logistics services needs of service purchasers. Moreover, the framework takes the aspect of business environment into account. Furthermore, the framework is operationalized into a set of research questions, which are used as the main method for data collection in the empirical research conducted for the case company, Itella Logistics.

The main finding from the empirical research is that Russian logistics market faces the problem of Universal service. In other words, all logistics services are offered to service users through the same service channel. In order to achieve a competitive position on the market, services must be developed towards efficient solutions. Hence, the service channel of basic logistics services must be simplified by implementing efficient IT-solutions. On the other hand, value-added services must be developed in close collaboration with the service purchaser.

Other findings of the research indicate that in addition to Moscow and St Petersburg metropolises, other Russian regions are becoming attractive locations for logistics service providers. Moreover, the change to a transparent business on the market affects the delivery channels so that direct deliveries to Russia will increase in the future. Additionally, the challenges of the logistics sector in Russia are the underdevelopment of infrastructure, lack of skilful workforce and bureaucracy of the processes.

Keywords: Russian logistics market, outsourcing, logistics services, service matrix
Total number of pages (including appendices): 103

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Logistiikkapalvelut Länsi-Venäjän muuttuvassa toimintaympäristössä - Case Itella

TIIVISTELMÄ

Nykypäivänä kasvava määrä yrityksiä ulkoistaa logistiikkatoimintonsa ulkopuoliselle logistiikan palveluntarjoajalle keskittyäkseen yrityksen ydinosaamiseen. Ulkoistamisen yleistymisen seurauksena logistiikan palveluntarjoajan on yhä tärkeämpää osata sovittaa tarjolla olevat logistiikkapalvelut asiakkaiden tarpeisiin. Tämä seikka korostuu erityisesti kehittyvillä markkinoilla, joissa toimintaympäristöllä voi olla suuri vaikutus palvelutarjontaan. Tällainen kehittyvä markkina on Venäjä, jonka talous kasvaa tällä hetkellä voimakkaasti ja tarpeet logistiikkapalveluille ovat suuret. Houkuttelevuudestaan huolimatta Venäjän markkinoille meno ei ole yksinkertainen tehtävä: kehittyvä markkina sisältää omat haasteensa. Tämän tutkimuksen tarkoituksena oli kehittää viitekehys, jonka avulla voidaan määrittää nämä haasteet ja toisaalta myös mahdollisuudet, jotka Venäjän markkina logistiikan palveluntarjoajan näkökulmasta sisältää. Tämän lisäksi tutkimuksella pyrittiin määrittämään ne logistiikan perus- ja lisäarvopalvelut, jotka ovat venäläisten palvelunkäyttäjien näkökulmasta tarpeellisia.

Tutkielma luo kvalitatiivisen viitekehyksen, jonka tarkoituksena on analysoida logistiikan palveluntarpeita. Viitekehys yhdistää logistiikkapalvelun analysoimisen eri osatekijät ja ottaa myös palvelun yritysympäristön analyysissa huomioon. Tutkimuksen empiirisen aineiston keruumenetelmänä käytettiin haastatteluita, joiden kysymykset johdettiin viitekehyksen eri osa-alueista. Empiirinen tutkimus toteutettiin Itella Logistiikan tarpeisiin.

Tutkimustulokset paljastavat, että Venäjän logistiikkamarkkinat kohtaavat ns. universaalipalvelun ongelman. Toisin sanoen kaikki logistiikkapalvelut toteutetaan saman jakelukanavan kautta. Jotta näillä markkinoilla voitaisiin saavuttaa hyvä kilpailuasema, tulisi yrityksen kehittää tehokkaita palveluratkaisuja. Tähän päästään yksinkertaistamalla ja standardoimalla logistiikan peruspalveluja sopivien IT-ratkaisujen avulla. Lisäarvopalvelut täytyy taas vastaavasti kehittää tiiviissä yhteistyössä palvelunostajien kanssa.

Tutkimustulokset osoittavat lisäksi, että Moskovan ja Pietarin lisäksi myös muut Venäjän kaupungit ja alueet ovat houkutteleva markkina logistiikan palveluntarjoajalle. Lisäksi tutkimustulokset paljastavat, että toimintaympäristön läpinäkyvyyden lisääntymisen myötä jakelutiet ovat Venäjällä muutoksen alla, ts. suorien toimitusten määrä on kasvussa. Toisaalta toimintaympäristön haasteita ovat tutkimustulosten mukaan infrastruktuurin kehittymättömyys, koulutetun työvoiman puute sekä prosessien byrokraattisuus.

Avainsanat: Venäjän markkinat, ulkoistaminen, logistiikkapalvelut, palvelumatriisi
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Helsinki, Finland, March 2008

Katja Havia

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

1 INTRODUCTION

Logistics services have become a very important part of national as well as international trade in today's business world. Over the past 20 years both demand and supply of services has been constantly increasing. Several research papers discuss logistics services either from the buyers' point of view (e.g. Andersson & Norrman 2002, Jalanka et. al. 2003, Skojett-Larsen 1999) or as service strategies, for example Haapanen and Vepsäläinen (1999) and Sartjärvi (1992). Among others, Berglund (2000) has widely studied a new phenomenon in the world of logistics – third-party logistics providers.

The supply of logistics services has multiplied in Western Countries compared to the 1980s, and there seems to be no end to the trend of outsourcing logistics functions. Increasing globalization, intense global competition and pressures to cut costs drive companies to outsource their logistics functions (Vepsäläinen, 1995). Outsourcing and value-added services increase flexibility and enhance efficiency as well as allow companies to focus on their core activities and allow logistics service providers to take charge of less strategic processes in the supply chain. The benefits of such service agreements can be considerable: simultaneous time and cost savings, more efficient activities, and thereby improved customer satisfaction and increased flexibility and customization (Vermeulen 1993, 26).

3PL has become a common title for many logistics companies. The 3PL phenomenon is recognized as demanding new types of service offerings, which differ from traditional services available for manufacturing and trade companies' support in managing logistics processes (Berglund 2000, 1). A 3PL company provides more than just a bundle of separate logistics services, such as trucking, express deliveries and warehousing. It combines the services in order to create strategic successful solutions for its customers. These solutions generally include value-adding services, which distinguish a 3PL service provider from the traditional logistics service providers. Logistics value-added services appear to represent a noticeable part of the 3PL's logistics offerings. An average of 15 per cent of sales of 3PL's has been measured to be generated from value-added services (Berglund 2000, 83). These value-adding services are not traditional logistics functions (e.g. transporting, storing, and shipping) and they have been moved upstream from the customer to the supplier (Brockman 1999, 38). For some logistics providers, it is value-added services that make them stand out

in the tight competition on the market and create the true value for customers (Hurtta, 31.1.2007).

The US and European third-party logistics market represent the pioneers of the 3PL industry. Lately also emerging markets of the world, especially China, India and Russia, have become attractive locations for 3PL service providers business expansions (Cap Gemini 2007, 6). Russia is geographically the biggest nation in the world. The country has shown strong annual GDP growth since year 1998 rouble crisis. The average GDP growth has been around 6 percent (BOFIT 2008, 2-4). Simultaneously, the infrastructure of the country remains highly undeveloped and the demand for logistics services is high. During 2004-2006 Russian market for logistics services grew by as many as 35,5 per cent (Kompaniya, 12.7.2007). In addition, Russia is a strategically important trade partner for Finland.

Russian 3PL market is still in its initial stages of development, and there is a clear need for additional research on the theme. The emerging business environment creates new challenges for any type of industry, and companies operating by the demands of competition need to understand the special characteristics of the market. In a relatively short time Russia has been able to transform from penury to the world's seventh-largest economy (White and Gullison 2008, 27). This growth and future potential can not be underestimated. As the economy is booming, the need for high quality logistics services is rising. At the moment, there are no significant signs of down turn of this growth rate of the economy and thus, the potential market for logistics service providers is very attractive.

However, the Russian economy is somewhat different compared to what the Western logistics companies are used to. Considerable amount of literature concerning Russian market as a cultural environment has been written, but more research on the Russian logistics market is needed. This market is relatively undeveloped and is still evolving, but it provides very attractive business possibilities for a logistics service provider.

This research attempts to provide insight into Western Russian logistics markets, and focuses especially on the logistics service needs of the companies operating in Russia. The aim is to understand the dynamics of the Russian logistics sector in order to better understand the service needs of the customers of logistics service providers in Western Russia. In addition,

the research combines previous service literature with the aspect of evolving business environment, and thus provides a new perspective to this field of research.

1.1 Research Problem and Objectives

Logistics companies entering new evolving markets face the challenges of new business environments. Logistics service needs are not the same around the globe, and an individual market specific approach is often needed in a new environment. Identifying customer needs and knowledge of present logistics service offerings play an important role in a successful market entrance. Not only entering new market areas should be the point of departure for such analysis, but also present service offerings should be constantly reviewed in order to improve the effectiveness of a service. Several researches in the areas of services, outsourcing and 3PL markets have been written in order to create tools for analysing logistics services (Sartjärvi 1992, Tinnilä & Vepsäläinen 1995, Sink & Langley 1997, Laarhoven et al. 2000, Skojett-Larsen 2000, Berglund 2000, Andersson & Norrman 2002).

A comprehensive understanding of the business environment dynamics and knowledge of service needs are essential for a successful logistics service provider. Consequently, the research question of this thesis is: *How to define logistics service needs in the changing business environment in Western Russia?*

There are four main objectives to guide this research:

1) Create a framework for examining the service needs and factors influencing these needs in an evolving business environment
2) Test and apply the framework to the case study
3) Based on the framework specify the possibilities and challenges that an emerging market involves from the logistics service provider's point of view
4) Track the basic and value-added logistics services that are appreciated by logistics service users in this business environment

On the practical level this study aims to clarify what are the basic and value-added logistics services that are vital and necessary in the electronics industry on the Russian market. Furthermore, the aim is to describe the current state of the Russian logistics sector and its

future prospects. This aim is to be accomplished in the empirical case study of this thesis, which was carried out for a Finnish logistics company Itella.

1.2 Scope of the Research and Data Collection

This thesis divides logistics services into basic and value-added activities. The definitions for these two aspects of logistics services are explained in the chapter 1.3. The literature review considers different frameworks for analyzing logistics services and the business environment. Moreover, it provides a brief glance at the relevant research in the academic and business world. In addition, special attention is paid to the Russian logistics market. However, the main purpose of this study is not to give an extensive description of the Russian market as a whole. The idea of this thesis is rather to focus on a specific line of business, in this case the electronics market, from a logistics service provider's point of view.

Qualitative approach was chosen as a research method for this thesis. The data for the empirical research was collected by interviewing electronics manufacturers and retailers operating on the Russian market. The qualitative research method was chosen because of the need for explaining and understanding a phenomenon in the real business world. According to Ellram (1996) qualitative methods provide depth and richness that allows the researcher to probe the "how" and "why" questions. Based on the literature review, a framework for analysing logistics service needs was created, and the research questionnaire was formed around the themes of the framework.

The questionnaire for the semi-structured interviews was created with the help of both Itella and HSE researchers. The questions were designed to guide the interviews and to collect information about the aspects of the framework. The questionnaire was pre-tested and a few questions were modified in order to increase the usability of the information. The questionnaire was translated into three languages: English for the thesis, and Finnish and Russian for the interviews. A total of 13 interviews were conducted mostly in Moscow, Russia during two research trips in December 2007 and February 2008. In addition, three interviews were conducted in Finland. The aim was to collect information about logistics service needs in Russia from electronics manufacturers and retailers operating in Russia. All the electronics manufacturers' representatives were employed by international corporations,

whereas nearly all the retailers worked for Russian companies. Russian interviewees were interviewed in Russian language.

It is important to emphasize that the answers of the interviewees represent the opinions of Moscow offices' representatives, and cannot be generalized to the whole country. However, during the interviews also interesting opinions about the other parts of the country were mentioned. Thus, the research is focused on the Western part of Russia, particularly on the St Petersburg and Moscow regions.

1.3 Key Definitions

Logistics terminology is sometimes ambiguous, and there might be several somewhat different interpretations about the same concept. In the following, the main terms for this thesis are defined.

3PL is an organization that manages and executes a particular logistics function, using its own assets and resources, on behalf of another company (Inkiläinen 1996, 43). The types of services a 3PL service provider may offer are warehousing, transportation management, distribution management, freight consolidation and value-added services.

Basic logistics service includes "traditional" logistics, e.g. transportation, warehousing and forwarding. Typically these services are routine activities with rather low customization for a customer's needs. Moreover, for the most part these services do not include any special arrangements.

Logistics value-added service in this research is a logistics service that adds value to a product by performing additional services. This service typically includes tailoring the service according to the customer's wishes and requires special arrangements. The emphasis in this thesis is especially on the warehouse value-added services.

Outsourcing can be defined as the strategic use of outside parties to perform activities traditionally handled by internal staff and resources. Typically companies that outsource their logistics function consider them as non-core and non-revenue activities.

Universal service refers to inefficient service offerings. The core idea of universal service is

that the variety of services is offered to customers using the same service channel (Haapanen & Vepsäläinen 1999).

Efficient service is delivered to a customer by combining an appropriate service channel and type of service. The complexity of a service, in addition to the customer relationship, defines the efficient type of service.

1.4 Outline of the Thesis

The study is structured as follows. In the second chapter service literature is introduced and such concepts as 3PL, outsourcing and value-added services are explained in detail. The chapter aims to provide insight into different frameworks for analysing logistics services. In addition, an approach for analysing the business environment is presented.

In the third chapter the methodology of this thesis is explained. This chapter focuses on explaining how the framework for this thesis is structured. In addition, this chapter explains how the framework is formed into interview questions. In the last part of this chapter the execution process of the empirical research is illustrated in detail.

The fourth chapter introduces the case study. First, a brief company introduction is given. Next, the findings of the research are illustrated in detail. Finally, the potential and challenges of the Russian market as well as recommendations are described.

Finally the summary, contributions as well as future research suggestions are presented in the last chapter of the study.

2 ANALYSING LOGISTICS SERVICES

"Logistics service can be defined as a customer and product specific action, which main purpose is to add desired value to a physical product" (Sartjärvi 1992, 52). Over the last two decades the share of services in the Finnish national product has increased substantially. This fact can be seen for example in the increasing demand for self services, the popularity of third part logistics service providers and the growth of narrowly specified customer groups' services. Self-services are replacing many of the traditional channels dominated by corporate sales and service personnel (Tinnilä & Vepsäläinen 1995, 57). Increasingly the previously in-house-made activities, such as transportation, warehousing, packaging etc are outsourced.

Today it is not enough to invest only in production and marketing. In order to create a competitive supply chain and become a market leader, a company has to invest in services (Haapanen & Vepsäläinen 1999, 64-74). There are several reasons behind this latest increase in the importance of services: emphasizing the importance of quality, constantly improving efficiency, developing customer relationships in every step of the supply chain and focusing on core activities to name a few (Haapanen and Vepsäläinen 1999, 64). Tinnilä and Vepsäläinen (1995) emphasize the most important factors behind the repositioning of the service processes: intense global competition, pressure to cut costs and the newest applications of information technology.

In recent years, the concept of services has received attention from various researchers. Aspects of the subject vary from general conceptualization of services to development of service strategies. Logistics services have specific characteristics that differ from a large part of the services described in the service literature. According to Andersson and Norrman (2002, 4) these characteristics are the following: logistics services mainly involve business-to-business relationships, where both buyer and customer are critical stakeholders. In addition, in many cases close interaction and cooperation play an essential role in the process.

Today service providers operate in a global economy that creates new requirements for service offerings. Very often effective and successful services on the domestic market may not be transformed into services in new business environments as such. Thus, extensive

knowledge of the new market environments is needed before a company enters the new challenging markets.

This literature review is divided into four chapters. Different service strategies are introduced in the first chapter. Next, the concepts of outsourcing and 3PL are explained and benefits as well as risks of outsourcing are illustrated. The third chapter focuses on defining basic and value-added logistics services. Finally, the last chapter introduces a framework for analysing business environment factors.

2.1 Service Strategies Literature

Business managers around the globe deliberate how the service offerings of their companies can be differentiated from the competitors in order to achieve competitive advantages. The creation of a service strategy requires the knowledge of customer needs and the understanding of the strengths of one's own company (Sartjärvi 1992, 59). Moreover, service industries - and service operations of manufacturing companies - are restructuring their delivery systems. Self-services are replacing many of the traditional channels dominated by corporate sales and service personnel (Tinnilä and Vepsäläinen 1995, 57).

As markets become more competitive it is often necessary to increase service divergence, i. e. differentiate services by offering a greater variety of services and channel options for the customers (Bask 2006, 26). Applications of new information technologies have created opportunities to re-engineer service processes in innovative ways (Tinnilä and Vepsäläinen 1995, 57). This chapter illustrates two different frameworks to approach service strategies.

2.1.1 Service Strategy

"Service strategy can be seen as a strategic angle of a company" (Sartjärvi 1992, 59). The core idea of a service strategy is in understanding the customer's needs as well as own strengths and the emphasis of business. The service strategy introduced by Sartjärvi (1992) identifies service offerings through four service strategies separated by two dimensions: 1) the dimension of service vs. cost-efficiency maximization and, 2) the dimension that defines the size of targeted market area (Figure 2-1).

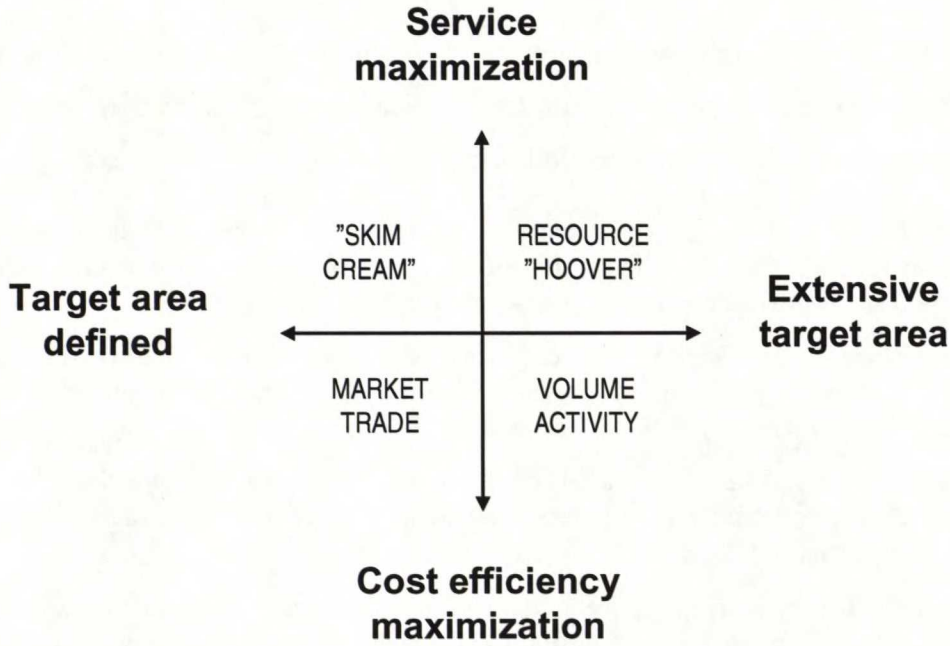

Figure 2-1 Service strategy dimensions (Sartjärvi 1992, 60)

Vertical dimension (service maximization vs. cost efficiency maximization) of this model defines that a company should make a clear decision whether to focus on maximization of quality, efficiency and accuracy of service, or to invest in cost efficient solutions. Sartjärvi (1992, 61) claims that the further the decision is from the centre of the dimension, the more efficient IT-system is needed. In other words, the strategic concentration of a company defines the need for a proper IT-solution. In addition, Sartjärvi (1992, 61-62) states that first and foremost service maximization should be directed to the development of value-added services according to customers' wishes.

The horizontal dimension of the matrix (target area defined vs. extensive target area) determines whether the company operates on a specific defined area (physical environment, e.g. a certain city or a country) or if the idea is to serve an extended area, when the environmental factors play a more important role. The extensive area requires efficient distribution channels and close cooperation with several members of the service processes. In that case, service maximization in addition to value-added services demands a considerable

number of resources (Sartjärvi 1992, 62).

According to Sartjärvi (1992) the service strategy of a company can be placed on the matrix defined by these two dimensions. As a result, four service strategies can be derived from this matrix. The strategies are illustrated in the following:

- ***Market Trade:*** A company operates on a limited defined area and the focus of the activity is on cost efficiency. Typically there is only one effective distribution channel that offers standardized services, e.g. a small local grocery store.
- ***"Skim Cream":*** The strategy of a company is to provide high quality services for limited customer segment. In other words, a company "skims the cream" from limited number of customers, e.g. privately owned hotel.
- ***Volume Activity:*** The target area of a company is not limited and the main concentration is on cost effectiveness. The quality of service plays a less important role, e.g. supermarket chain.
- ***Resource "Hoover":*** High quality and tailored service is the main idea of this strategy. The target area is not defined. This is usually an expensive strategy, but when customers are ready to pay for high quality services it is also a very profitable strategy.

Satrjärvi (1992, 61) states that defining the service strategy is not a simple trade off between costs and quality. In other words, a company that decides to focus on service quality cannot forget the cost aspect, and vice versa: a cost efficient company should not underestimate the meaning of service quality. The main outcome of the service strategy model is to help make strategic business decisions and coordinate the resources accordingly.

The strategy of service maximization concentrates mainly on the development of those value-added services that are appreciated by customers. According to Sartjärvi (1992, 61-62) a company that decides to focus on the service quality strategy should in the beginning focus on the most demanding customers. Starting with these challenging customers will ease the expansion of the customer base later. The cost efficiency strategy, on the other hand, focuses on the production of basic services with lowest possible costs. This argument states for the fact that cost efficiency and development of value-added services do not fit into a single service strategy. Figure 2-2 illustrates the positions of basic and value-added services on the service strategy matrix.

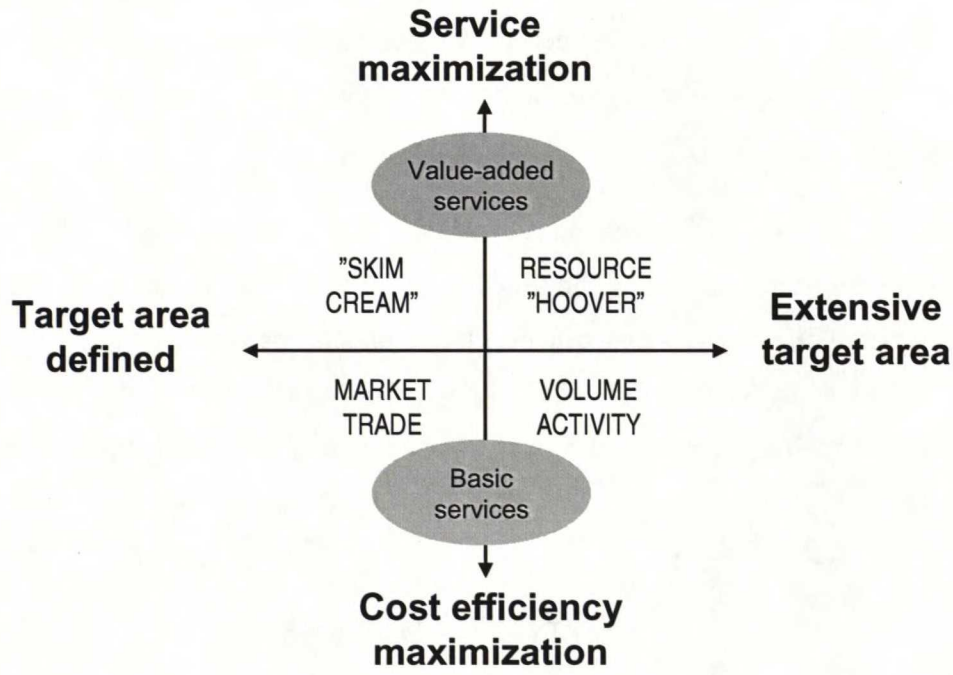

Figure 2-2 Services on the service strategy matrix (adapted from Sartjärvi 1992, 60)

The service strategy model of Sartjärvi offers a comprehensible model for defining the service strategies of a company. The matrix specifies four, fairly simple service strategies to choose from. Sartjärvi's model is a suitable tool for pondering on strategic strengths of a company. The author advices to examine the strengths of a company carefully and to match the service strategy accordingly. However, the model can be criticized for the lack of real business life examples. In addition, there are no recommendations on how the strategies should be executed or implemented in a real business environment.

2.1.2 From Universal Service to Differentiation Strategy

Mäkelin and Vepsäläinen (1989) take a different approach to service strategies. According to them, the description of a service requires two factors: the contents and the distribution channel of a service. The contents of a service refers to *how a service satisfies the needs of a customer* and how these needs are identified, whereas distribution channel reveals the information about the *execution channel of a service* and what type of systems are used in order to find the customers as well as to keep contact with them. In the latter literature these

terms are replaced by *type of services* and *type of channel*, respectively (Tinnilä and Vepsäläinen 1995, Haapanen and Vepsäläinen 1999). According to Mäkelin and Vepsäläinen (1989, 33) the separation of these two factors is fundamental especially in planning innovative solutions.

Through these two variables Mäkelin and Vepsäläinen (1989) have developed a service matrix, in which the concept of service provided is distinguished from the specification of the service channel. Different services can be placed on the matrix according to type of service and type of channel (Figure 2-3).The matrix has been further developed in the latter literature (Tinnilä and Vepsäläinen, 1995 and Haapanen and Vepsäläinen, 1999 among others).

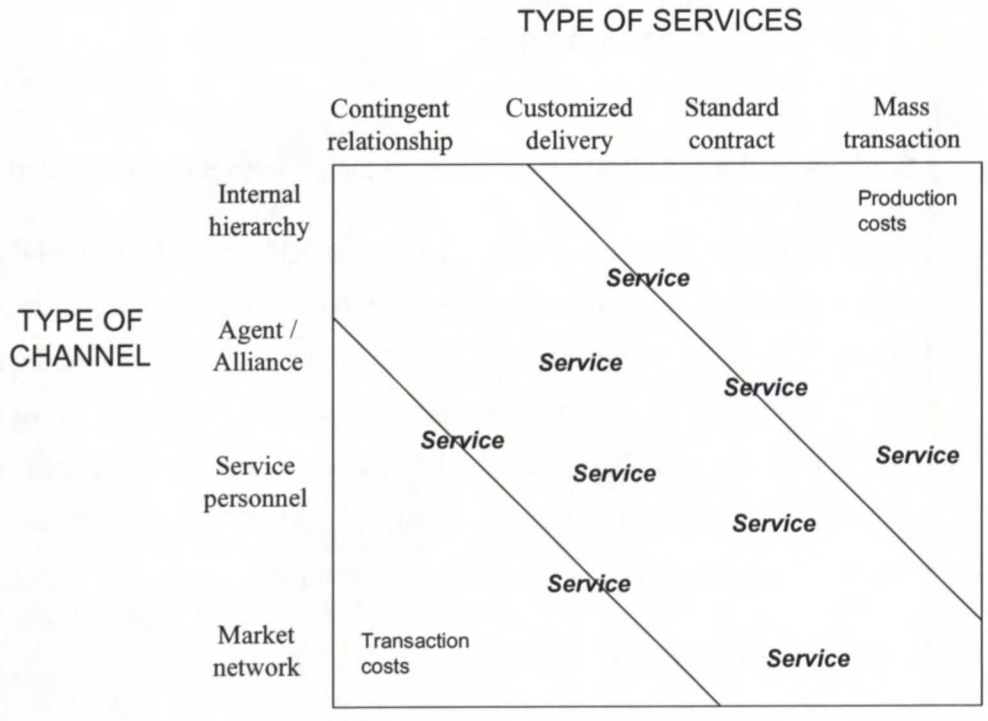

Figure 2-3 Service matrix (adapted from Haapanen and Vepsäläinen 1999, 124)

The type of services can be measured in two different ways: according to its complexity and situational relevance (Mäkelin and Vepsäläinen 1989, 35). According to Tinnilä and Vepsäläinen (1995, 61-63) the descriptions of the type of services are the following:

- Mass transaction – A simple service with few options and little customization of the terms of delivery. Transactions are routine tasks carried out according to market rules and at market price. Examples include transferring money, withdrawing cash or interacting with databases.
- Standard contracts - Services that may involve rather complex specifications but are not extensively adapted to an individual customer. There is a standard contract that specifies the options and application to the customer. Examples include bank loans and individual lines of insurance services.
- Customized delivery - Services that are tailored to individual customers involving some uncertainty and contingencies. In addition to being more flexible than standard contracts, a customized delivery requires more confidential management of relationships as both the provider and customer may consider a number of options in drawing up the service contract. Examples include investment advising and corporate risk management.
- Contingent relationship - Services involve complex problems, several interrelated activities and intensive communication. This type of service is described by risk sharing requiring close relationships. Examples include project management and long-term systems development.

Similar services can be produced through several different distribution channels. A good example is a banking service, where a customer wishes to withdraw money: this transaction can be made either 1) using ATM, 2) going to a bank clerk or 3) as a self service via Internet. Thus, three different service channels can be used in order to consume the same service. Moreover, Tinnilä and Vepsäläinen (1995, 63-64) separate four different types of channels:

- Market network - The channel provides direct customer access to market resources with minimal intermediation, making it the shortest of channels. The market network is based on self service of customers, for instance the use of ATM or direct ordering systems.
- Service personnel - The channel include salespeople in a store, clerks in branch offices or field maintenance personnel. This is a short channel based on personal interaction provided by one organization. The service personnel work for one firm. The channel is longer if there are managers or supporting staff members involved in the process.
- Agent/alliance - This channel includes experts, third party representatives and independent agents that are fairly close to the customer acting as middlemen or mediators in the service channel. Sometimes even the expert units within the corporation may assume this role. In this type of channel the relationship between the channel members is based on trust as well as formal contracts.
- Internal hierarchy - This service channel means that the service is procured within the organization needing it. Internal hierarchy is considered a long channel from the point of view of the potential service providers since there is no real customer but instead

an employment relationship. The channel is intra-company, the relationship between the channel members is very close and the process is owned by the organization.

According to Haapanen and Vepsäläinen (1999, 119-162) there are two stages in the evolution of services in different industries: on one hand, it is generalization, and on the other hand differentiation of services. One of the aspects of generalization of services is universal service.

The core idea of universal service is that the variety of services is offered to customers using the same service channel which leads into inefficiency (Figure 2-4). Even the simple routine services are offered to the customers with moderate close relationship. The services offered by different service providers do not differ and thus, service providers compete with very similar service packages. According to Haapanen and Vepsäläinen (1999, 142) especially companies that offer services using service personnel fall into universal service category. Such companies are usually public organizations, personal banks and insurance service companies.

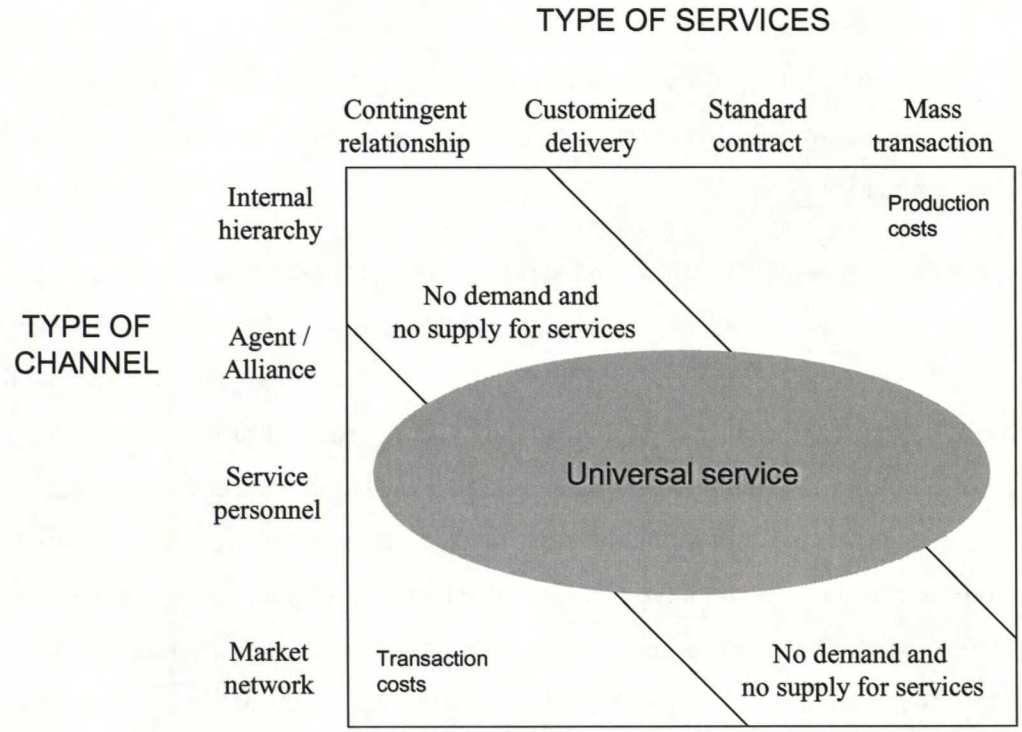

Figure 2-4 Universal service (Haapanen and Vepsäläinen 1999, 124)

The benefits of universal service are mainly on the service provider's side: (1) Through a single channel a company aims to increase the sales by offering a greater variety of services (2) The acquisition of new customers is efficient due to a standardized service channel (3) Service itself is efficient through a single service channel (4) The control of the service process is active through an integrated control system (Haapanen and Vepsäläinen 1999, 122-123). Thus, the pitfall of universal service is that a single distribution channel is not always the most efficient and most wanted by the customers. High quality services can be offered only by focusing on customer segments' true needs. Mäkelin and Vepsäläinen (1989, 73) outline that field personnel of the universal service is too inflexible to react to cost and demand pressures caused by services.

The areas of inefficiency are discovered in two corners of the matrix. In the upper right-hand corner, high production costs and low levels of value-adding activities are found when offering simple services with a close relationship. In the lower right-hand corner, providing

complex services with a loose relationship leads to high transaction costs and quality problems. As a consequence, relationships with end users are undeveloped, and it seems that the client's requirements are not known well enough. Universal service creates both of these inefficiencies: the relationship is moderate and all the services are delivered to the customers through this same channel.

In reality, the development of business and services today has led to service divergence – the focus is towards channel efficiency (Mäkelin and Vepsäläinen 1989, 72). The increasing pressure of global competition and emphasized role of the customer have led to the divergence of services offered by service providers. Today, instead of massive and inflexible companies, the market is dominated by those companies that can successfully change under the pressure of competition and tailor the services according to their customers' needs. The solutions brought by IT systems have a huge impact on this improvement. With the help of tailored IT programs, often SAP based solutions, companies can not only improve their mass services, but also specialize to serve a particular segment of customers and expand their service range into value-added services.

As was pointed out, the development of business and services has led to differentiation of services due to the ineffectiveness of universal service. This divergence of service channels can be observed in the service matrix (Figure 2-5). Tinnilä and Vepsäläinen (1995, 65-66) as well as later Haapanen and Vepsäläinen (1999, 128-130) gather characteristics of services (type of channel and type of service) into the service strategy matrix that distinguish efficient "generic" services. According to researchers the efficient services are located on the diagonal of the matrix. Next, the characteristics of these efficient services are described.

- Fast routine processes – a combination of mass transaction service and market network channel. A routine process means self-service via forms, terminal connections or phone calls. Main advantages are low cost and availability. These are usually simple services requiring a field distribution system.
- Flexible integrated processes – these processes represent service contracts provided by service personnel. The service is standardized by defining several options for the customer to choose from. The options of service are pre-determined by the definition of service.
- Focused processes – these processes are the combination of customized delivery and agent or alliance channel. Processes provide a degree of expertise and customization

according to individual customer needs.

- Adaptive processes – these processes require confidential communication and flexible access to a customer's resource base. Contingent relationship deal with complex problems with a need to adapt to changing customer requirements and often call for modification of other service processes.

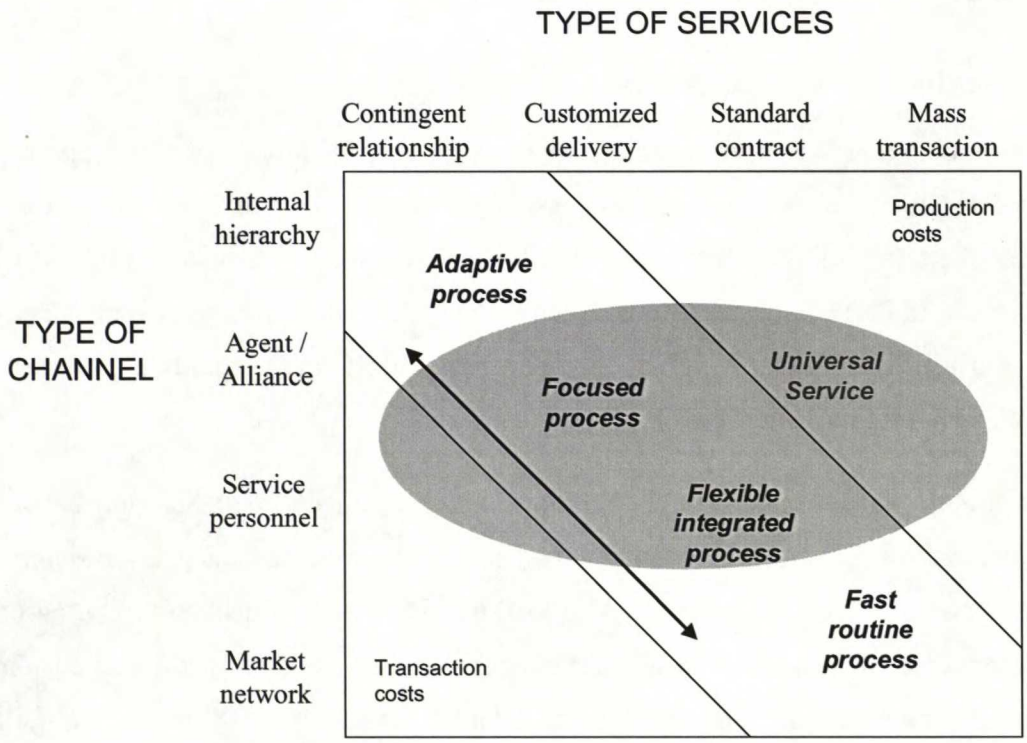

Figure 2-5 Service matrix with efficient services (adapted from Tinnilä and Vepsäläinen 1995, 62)

The outcome of the matrix is that a service is efficient only when it matches properly the delivery channel with the customer relationship. In other words, simple services should be delivered through a short automated delivery channel, when the costs of providing the service are minimal for both service provider and service user. On the other hand, complex and value-added activities should be designed and executed with close collaboration with the customer.

Most of the efficient services from different fields of industries can be located to the matrix, but Haapanen and Vepsäläinen (1995, 130) emphasize that also different transitional forms

and service combinations exists. In addition, Tinnilä and Vepsäläinen (1995, 66) stress the fact that in a normal competitive business environment a company must change its strategy of services closer to the diagonal.

The service matrix is an important part of this literature review, because the matrix is exploited later in the empirical part of this research.

2.2 Outsourcing Logistics Services

The outsourcing trend has been continuously growing over the last years. The options for the firms are to either operate logistics processes by themselves or to partially or completely outsource them to a third party in the form of a logistics service provider (3PL), which will be introduced in detail in chapter 2.2.1 (Deepen 2007, 19). The term outsourcing stands for a function that previously has been made by a company itself, and currently is provided by an external company (Inkiläinen 1997).

In outsourcing the investment in cooperation is significant and collaboration between the companies is close. As the collaboration between the parties becomes deeper, the cooperation takes the form of a partnership. According to Haapanen and Vepsäläinen (1999, 64-65), the criteria for successful outsourcing is among others the value added for the end customer by every single company in a supply chain. Jalanka et al. (2003, 8-9) set the following characteristics for an outsourcing relationship:

- Shared development of operations
- Long term extended contracts made by higher organizational level
- Performance, quality and costs are measured strictly
- Strong integration of data systems
- Termination of cooperation involves high risks

The logistics literature mentions several reasons for the rising popularity of outsourcing. Jalanka et. al. (2003) have interviewed several Finnish logistics experts in order to find out the reasons for outsourcing. According to their research, the most important factors for outsourcing were the following:

- a service purchaser's lack of appropriate space and equipment
- high degree of investments
- a company's willingness to divest an activity

- desire for turning fixed costs into variable costs
- better knowledge of the costs caused by logistics as well as general cost savings

Naula et. al (2006, 43-72) have studied the development of logistics in Finnish industry and trade. According to their research results, the most common reason for outsourcing logistical functions for both manufacturing as well as trade companies remains the willingness to concentrate on the core activities of a company. Similar research results have been found by other authors (Vaidyanathan 2005 and Vermeulen 1999).

Andersson and Norrman (2002, 5) list five main reasons for the generalization of outsourcing: (1) Increasing globalization markets, (2) Focus on agility and core competence, (3) Consolidation of the logistics markets, (4) Development of information technology and e-commerce and (5) Future purchasing situations. In addition, the research results of Lehti (1999) confirm the reasons for outsourcing listed above. According to Lehti (1999) lower costs, increasing flexibility, improving service level, a chance to focus on the core activity and turning fixed costs into variable costs were the most significant reasons for outsourcing warehouse operations.

The most outsourced activities are transportation, warehousing and distribution (Jalanka et. al. 2003, 9). Outsourced transportation typically includes outbound logistics such as warehousing, order processing and invoicing. At the same time, reverse logistics services may include outsourcing of recycling, returning of products, warranties and material flows related to these activities (Jalanka et al. 2003, 9-10). According to research by Sink and Langley (1997, 171) the three most popular outsourced services were: outbound transportation (77,1 per cent of respondents), freight bill auditing (79,3 per cent) and warehousing (74,6 per cent). The empirical research by Naula et. al. (2006, 65-67) identifies that clearly the most common outsourced activities for manufacturing, construction as well as trade companies were transportation, reverse logistics and forwarding. At the same time the least popular outsourced services for the same groups were invoicing, order receiving and inventory control. Lower level of outsourcing of these functions refers to the fact that these actions remain strategically important to the companies.

2.2.1 Defining 3PL

The concept of 3PL (Third Party Logistics) is closely related to outsourcing. Jalanka et. al. (2003, 8) define the term as follows: 3PL refers to the third level of cooperation. The first level (1PL) usually includes purchasing of single services. On the second level (2PL) the number of purchased services usually adds up. The third level (3PL) stands for thorough outsourcing of logistics functions. The aim of the cooperation on the third level is to exploit the network of the logistics service provider. In addition, Naula et. al. (2006, 8) emphasize that the time frame of cooperation between 3PL and service purchasing company is usually long-term. Moreover, Sink and Langley (1997, 172) classify 3PL within contract logistics. Perhaps the most extensive definition of 3PL is by Laarhoven et. al. (2000, 426), who has examined the relationships between third party logistics service providers and service purchasing companies:

> *"3PL are activities carried out by a logistics service provider on behalf of shipper and consisting of at least management and execution of transportation and warehousing. In addition, other activities can be included, for example inventory management, information related activities, value-added activities or even supply chain management. Also, the contract may contain some management, analytical or design activities, and the length of cooperation between shipper and provider is at least one year distinguishing third-party logistics from traditional "arms-length" sourcing of transportation and/or warehousing."*

According to Bask (1999, 9), in literature synonyms for "3PL", such as "contract logistics" or "outcontracting" are used to describe the same phenomenon. The term of 3PL has its foundation in a triad form of relationships covering seller, buyer and 3PL company. The triad is considered to entail three relationships: (1) relationship between seller and 3PL company, (2) between buyer and 3PL company, and (3) between seller and buyer (Bask 1999, 9). These relationships are illustrated in the Figure 2-6.

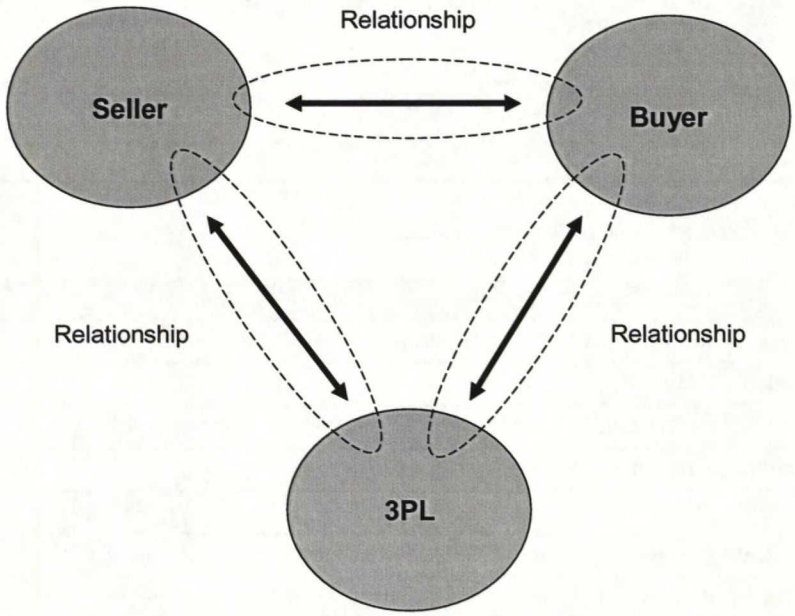

Figure 2-6 Relationships among seller, buyer and 3PL (Bask 1999, 9)

A clear trend over the last fifteen years has been the outsourcing of non-core transport and warehousing functions. Companies acknowledge that warehousing and transportation activities are not a part of their core business and therefore these activities are increasingly outsourced to logistics service providers. This outsourcing to third-party logistics service providers has been growing, over the last decade or so, at a rate of approximately 10-15per cent per annum (European Distribution Warehousing 2006).

2.2.2 Benefits and Risks of Outsourcing

Outsourcing of logistics can increase functionality of logistics and reduce the costs and thereby improve the competitiveness of a company (Jalanka et. al. 2003). According to Dornier et. al. (1998, 183) the outsourcing of freight, warehousing, order processing and final transportation can uplift service levels by added flexibility and enhanced inventory management as well as decreased costs. Table 2-1 summarizes benefits as well as problems of logistics outsourcing reported by respondents of the mail survey of Sink and Langley

(1997, 182).

Table 2-1 Benefits and problems reported with logistics outsourcing (Sink and Langley 1997, 182)

BENEFITS AND PROBLEMS REPORTED WITH LOGISTICS OUTSOURCING	
Experience of Users with Outsourcing Efforts	% of 3PL Users (n=116)
Benefits:	
Costs for outsourced functions have been reduced	57,7
Increased flexibility	56,3
Service levels for the outsourced functions have been improved	52,1
Employee base has been reduced	50,7
Firm is better able to focus on core competencies	38,0
Capital expenditures for logistics have been reduced	31,0
Availability of greater/more specialized logistics expertise	26,8
Improved use of information technology	19,7
Other	12,7
Problems:	
Control over outsourced function(s) has diminished	35,2
Time and effort spent on logistics have not decreased	33,8
Cost reductions have not been realized	24,4
Quality of third-party employees has not been realized	22,5
Service-level commitments have not met our expectations	21,1
Unsatisfactory transition occured during implementation stage	18,3
Customer complaints have increased	12,7
Other	8,5

The outsourcing of logistics is not a simple process and it involves several risks. Essential for answering the question regarding the optimal outsourcing scope are the resources of the respective firm and alongside the trade-off between consequential advantages and disadvantages. This will vary according to the individual firms' perception of the benefits and risks associated with the particular outsourcing arrangement (Deepen 2007, 21).

According to Jalanka et. al. (2003, 11) the most common barriers for logistics reported by the respondents were among others the following:

- Logistics is the core activity of the company
- Company has poor knowledge of total costs of its activity
- Starting expense
- Lack of proper know-how
- Dependence on another company
- Trust issues
- Fear of loss of control

Also the research by Logistiikkaselvitys (Naula et.al. 2006, 67) confirms the same issues being the reasons that prevent companies from outsourcing logistics functions. Logistiikkaselvitys is a yearly published research that among other issues measures the benefits and problems of outsourcing. What is interesting about the research results in 2006 is that "logistics being core activity" and "the fear of loss of control" were no longer the most important reasons preventing companies from outsourcing their functions. These results suggest that the angle and general opinions about outsourcing might be changing. The issues that did stand out in the research were the doubts about service providers' level of service as well as the degree of cost savings. However, Naula et. al. (2006, 68) emphasize that general attitude towards outsourcing services was positive.

2.3 Basic and Value-added Logistics Services

According to Sartjärvi (1992, 47) services can be divided into basic services and value-added services. Basic services are static, independent of time and place, usually very similar among competitors and necessary. On the other side, value-added services are more dynamic by nature and may vary depending on customers and distributors (Sartjärvi 1992, 47). Andersson and Norrman (2002, 4) describe basic services as traditional logistics services, (e.g. transportation and warehousing) that for most producing companies are at the border between leverage and non-critical items.

Today many 3PL service providers act as an important link in the supply chain of their customers. In addition to outsourced transportation, warehousing and reverse logistics, many 3PL companies provide value-added services. According to Jalanka (2003, 10) besides basic services many service providers often offer different value-added services such as manufacturing and assembly services, pre-collection, finishing of products, packaging, labelling and coordination of transportation flows.

The supply of logistics value-added service has increased significantly during the past decades. For instance, the amount of warehouse value-added services of Itella has grown in Finland during the past five years several hundred percent (Mika Larinen, 26.9.2007). Also the results of Laarhoven et. al.'s research (2000, 430) refer to outstanding growth of supply for logistics value-added services. According to Andersson and Norrman (2002, 3) increasing number of companies purchase logistics services in service bundles, and the amount of value-added services and different IT solutions in these bundles is growing at a fast pace.

The nature of the total logistics services bought, and the corresponding purchasing process, can be more or less complex. Andersson and Norrman (2002, 3) separate traditional logistics services from advanced ones according to the degree of complexity of a service. The focus of the service, whether it is on value-adding or handling, drives the degree of complexity, and thus distinguishes the advanced logistics services from the basic ones. Figure 2-7 summarizes the separation between these two types of logistics services.

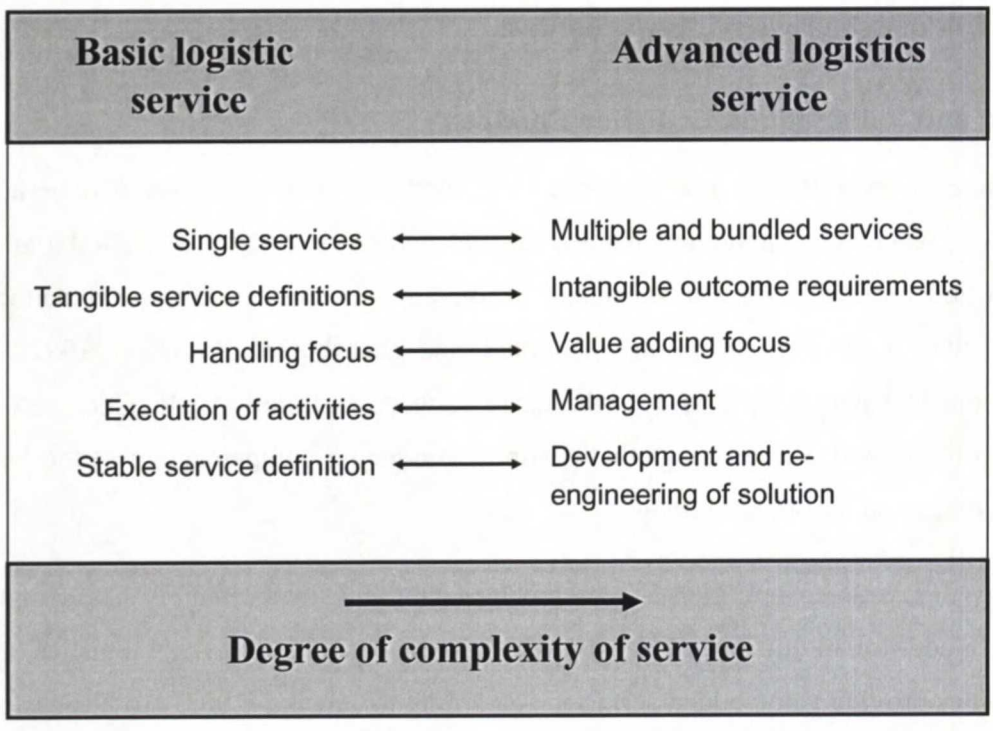

Figure 2-7 Advanced versus basic logistics services (Andersson and Norrman 2002, 4)

The logistics literature has several definitions for value-added services. Value-added services

(VAS) specialize in product sorting, packaging, assembly, testing, maintenance, recycling, spare parts, data processing and reporting services as well as in customer relationship handling, marketing and sales services (Haapanen and Vepsäläinen 1999, 272). Inkiläinen (1997, 101) is more specific in his definition for value-added services. According to him, VAL means that value is added to a product by performing some service in a warehouse including tailoring the service according to customer's wishes. Inkiläinen (1996, 40) also defines the activities for the value-added services: value-added activities transfer functions from production sites along the supply chain, closer to the end customer.

According to Brockman (1999, 38) *warehouse* value-added services include special labelling, customized packaging, servicing vendor-managed inventories, pre-ticketing, making retail merchandise store-ready, and even performing electronic data interchange. Brockman emphasizes that there are two characteristics of these activities that qualify them as value-added: they are not traditional warehouse functions (e.g. receiving, storing, picking, and shipping) and they have been moved upstream from the customer to the supplier. Therefore, these services should be viewed as services that provide extra value to the customer, inasmuch as the supplier can perform the services effectively and reduce the customer's operating costs more than the supplier increases the selling price.

Berglund (2000, 83) defines value-added services as follows: Value-added services (VA) are services that add extra features, form or function to the basic service. Berglund divides value-added services into three different types:

- services relating to manufacturing or assembly
- sequencing or postponement activities, and
- customers support or call centre, and administrative services

According to Berglund (2000, 83) these types of activities do appear to represent a noticeable part of 3PLs logistics offerings, an average of 15 percent of sales has been measured. Berglund outlines that focus of these companies has consequently changed completely from the production of functional activities supporting logistics processes to that of the physical flow of material.

Okkonen and Lukka (2004) offer a somewhat different point of view. The researchers separate logistics value-added services into three groups: packaging services, financial

administration services and manufacturing value-added services. Okkonen and Lukka (2004, 7) state the following:

> *"Packaging services are warehouse value-added activities. The service may include for instance customer specific sales lots, changing of packages or bundling of products. Financial administration services contain invoicing and services related to accounts payable and receivable. Manufacturing value-added services include actual product changes and assembling. As a result of differences of industries manufacturing value-added services may vary: for instance for electronics industry installation and assembly services are common, whereas in metal industry manufacturing, repair and maintenance services are executed."*

The classification of logistics value-added services by Okkonen and Lukka is somewhat unique in the literature. However, it is well rationalized and suits for classification of different services.

There are several benefits for purchasing value-added services. Inkiläinen (1997, 101) lists some of these benefits:

- reduces risks
- helps in defining optimal operational level
- reduces inventory
- reduces total investments
- helps to achieve scale benefits
- improves speed of deliveries

Haapanen and Vepsäläinen (1999, 205-215) interpret value-added services as natural continuum of divergence of logistics services. As lead-times have shortened and business environment has become increasingly streamlined, logistics centres straighten their roles by providing manufacturing and customer tailored value-added services, in addition to traditional logistics services (Haapanen and Vepsäläinen, 1999, 205). Moreover, Haapanen and Vepsäläinen emphasize that value-added services are based on the pull-principle, wherein the value chain is directed by the actual demand. Hence, value-added services can be divided into two sections: the actual manufacturing value-added services and logistics processing services (Haapanen and Vepsäläinen 1999, 206). Haapanen and Vepsäläinen (1999, 206) also mention that value-added services largely affect the delivery stage, whereas with no significant delays the following services can be provided:

- Assembly of product parts

- Packing and unitisation
- Formation of customer specific sales lots
- Quality control
- Price marking
- Maintenance and repair
- Reuse repair
- Reporting and follow up

According to Lehti's (1999, 43) research of 59 Finnish companies from different branches, the following warehouse value-added services were the most popular: handling of freight documents (35 per cent of the respondents), labelling and packing of products (29 per cent), return and repair functions (15 per cent) and assembly of products (14 per cent). Research results also indicate that value-added services provided by a logistics service provider are an important factor (the average of 3,5 according to Likert's scale one to five) in selection criteria for a logistics partner (Lehti 1999, 52). In addition, the absence of value-added services was seen as one of the factors influencing the decision to change the warehouse logistics service provider (Lehti 1999, 59). In other words, value-added services are an essential part of logistics service offerings today.

Tinnilä and Vepsäläinen (1995, 75) place value-added services in the top left corner of the service strategy matrix (Figure 2-8). According to the authors, value-added services are the consequence of repositioning of logistics services. Type of service for the value-added services is mostly carried out through customized delivery. In addition, logistics value-added services are usually customer specific and based on individual contracts. The type of service channel is between internal hierarchy and agent: the aim is to be available and flexible whenever the customer has specific needs for the service.

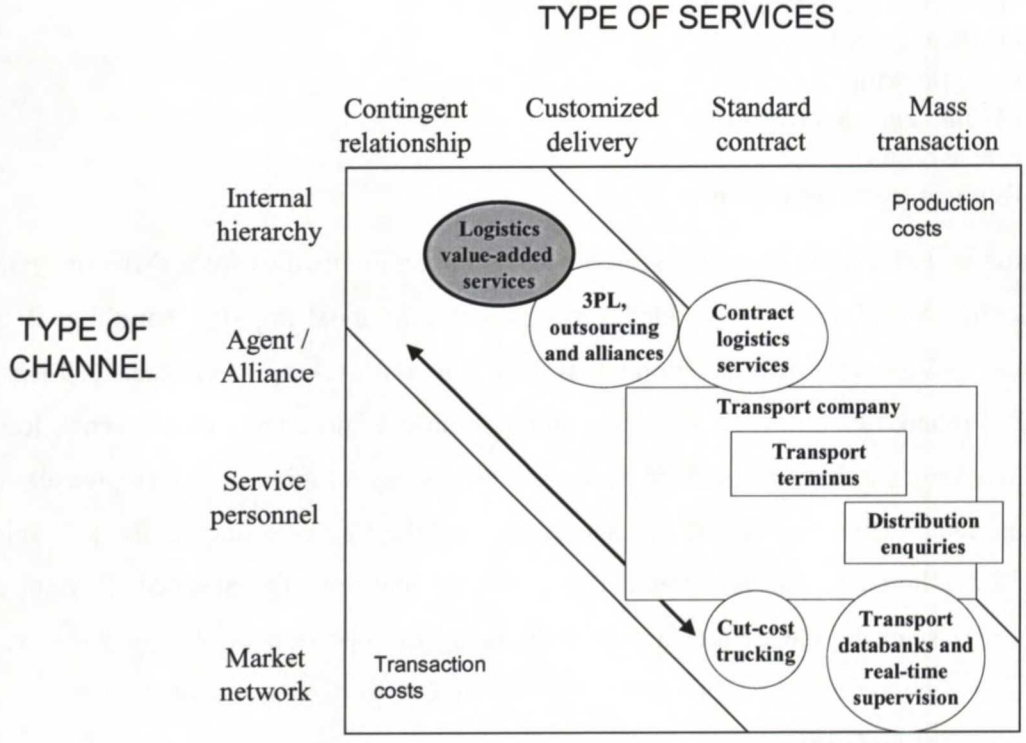

Figure 2-8 Examples of repositioning strategies in logistics and transportation services (Tinnilä and Vepsäläinen 1995, 75)

According to Haapanen and Vepsäläinen (1999, 207-208) value-added services require close cooperation between a service provider and a service purchaser. Moreover, well organized and successfully executed value-added services are the factor that creates a lasting long-term relationship between a service provider and a buyer (Hurtta, 31.1.2008).

2.4 Service Business Analysis

Today an increasing amount of companies internationalize their operations. Resulting from the intensifying competition, globalization and increasing requirements of the customers, it might become necessary in the future for the logistics service companies to distinguish themselves better from the competitors and generally reform their businesses to better meet the continuously changing conditions of the business environment. Thus, the business environment affects greatly these decisions to reorganize the operations. This last chapter is different from the other parts of the literature review: it presents a framework for business

environment analysis. This aspect is important considering the case study of this thesis.

When analyzing logistics service business from the comprehensive service business point of view, it is important to take the customer needs into account already from the beginning. Furthermore, the external factors such as the business environment and regulation generally affect the operations. Platan (2006) takes this business environment aspect into account in her framework for analyzing logistics service businesses (Figure 2-9). Platan analyses a logistics business solution from a single customer- or case-point of view. This framework applies a perspective of providing the customer suitable, comprehensive service according to their unique needs. The framework of this study is illustrated later in the chapter 3. It is a modification from Platan's framework.

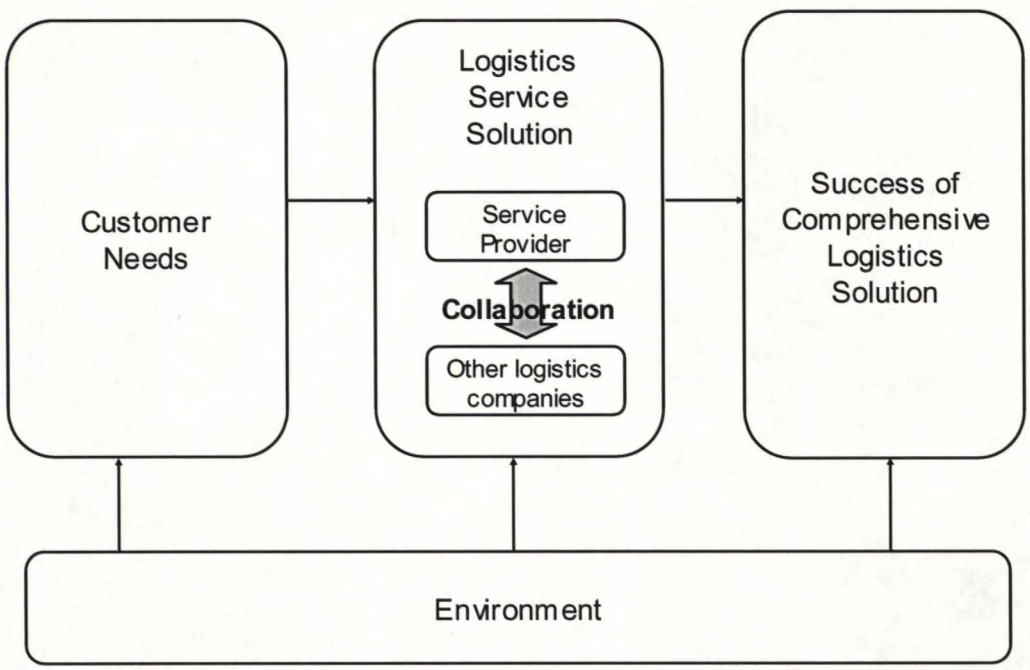

Figure 2-9 Framework for analyzing logistics service business (Platan 2006, 62)

Platan divides her framework into four components: (1) Customers Needs, (2) Logistics Service Solution, (3) Success of Comprehensive Logistics Solution and (4) Environment. The main idea of this framework is to start the analysis of a service solution with customer

needs, analyzing the special characteristics of the customer's operations and logistics problems.

According to Platan (2006, 63), in order to provide the customer a comprehensive logistics solution, typically at least some degree of collaboration is required with other logistics companies. The success of the collaboration and partnership may represent a critical element in this phase, as it may be the key for the entire success of the comprehensive service solution due to the requirements of fastness and flexibility. In addition, the external factors such as competition and regulation generally affect the operations.

3 METHODOLOGY

In this chapter the methodology of the empirical research of this study is introduced. First, the framework for analysing logistics service needs is illustrated in detail. The focus is on framework design and detail description. Next, the application of the framework for this particular study is discussed. Section 3.2 furthermore describes how the theoretical framework was operationalized into a set of interview questions. Finally the execution of the research is introduced.

3.1 Factors in the Service Process of a Supply Chain

The demand for services is a result of various factors in a supply chain: competitors, customers, market demand etc. Not only the needs of several players of a supply chain, such as manufacturers, resellers and wholesalers affect the demand for logistics services, but also the environmental factors can influence the demand for such services. Recognition of these factors and their influences is one of the main objectives of this study.

The framework of this study is a modification from Platan's framework introduced in the chapter 2.4. Platan analyses four factors (Customers Needs, Logistics service Solution, Success of Comprehensive Logistics Solution and Environment) in order to develop a company's business towards a more comprehensive service provider. The approach of the framework used in this study is somewhat different from Platan's. Where Platan analyses a logistics business solution from a single customer- or case-point of view, the aim of the framework of this study is rather to analyze the service needs of an entire supply chain. The idea is to test how different factors affect the demand of services. In addition, the aim is to develop a framework that can be used to analyze these factors, and also derive recommendation based on empirical research.

Because of the intensifying competition, globalization and the requirements of the customers, it becomes vital for successful logistics service companies to understand the needs of the customers as well as changes of the business environment. Many internal and external factors affect the demand for logistics services in today's hectic business world. In Figure 3-1 the framework for analysing logistics service needs is illustrated. The core idea of the framework is to observe a simple supply chain from a manufacturer to the end customer. In this case the

chain is simplified: number of different middle men, such as dealers and retailers, are left out of analysis in order to keep the framework fairly simple. For the same reason, also the needs of end customers are not analysed in this study. Thereby there are five elements included in this framework:

- Manufacturer and retailer needs
- Business environment (present and future)
- Present logistics services
- Service matrix
- Recommendations for logistics services

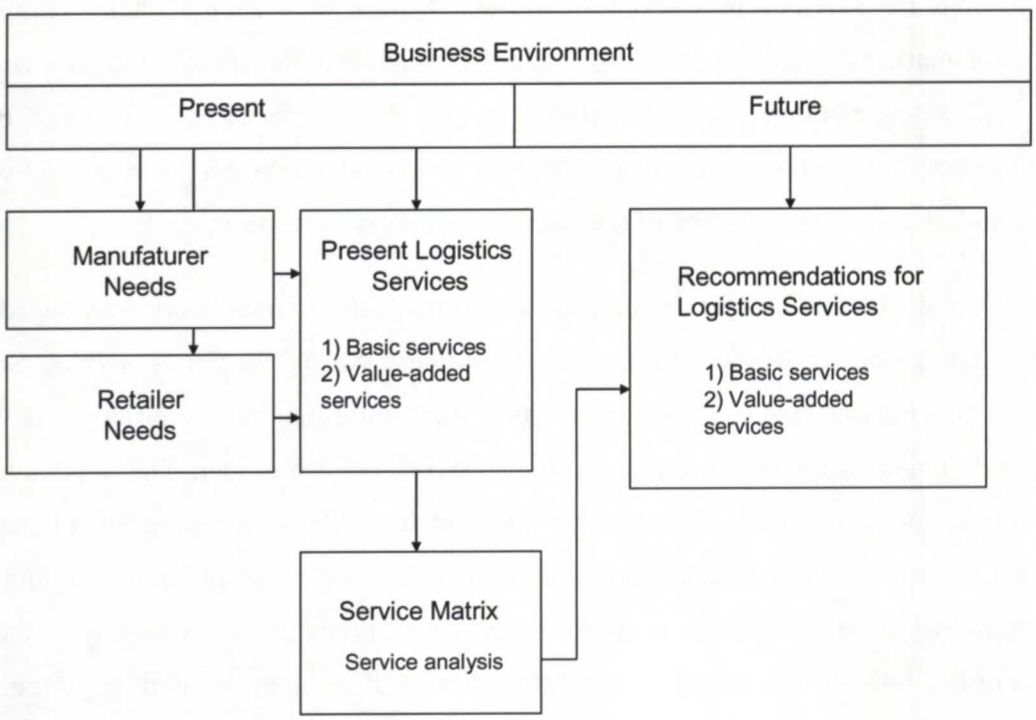

Figure 3-1 Framework for analyzing logistics service needs

The starting point of this framework is manufacturer and retailer needs for logistics services. In a typical supply chain the cycle of a product starts in a factory of a manufacturer. Later, the products are delivered to a retailer for the final sales to the end customer. There are usually several product and supply chain characteristics that determine the need for logistics services of a manufacturer and a retailer. It is important to carefully examine and understand

these factors in order to provide applicable solutions for these needs.

The second element of this framework is the business environment. In the framework this element is divided into present and future business environments. External factors, such as regulation, infrastructure, competition, future trends etc. all affect the supply chain, and thus have an impact on the services provided. In fact, business environment affects all the other elements of this framework either directly or indirectly. For instance the law and regulations create the boundaries that influence all the players in the supply chain: manufacturers, logistics service providers, retailers as well as end customers. On the other hand, the external environment may create opportunities in the form of technological innovations or natural resources. Overall, the influence of the business environment on service needs can be significant.

The third element in this framework is present logistics services. These services may vary from single services, as warehousing and transportation to the complete outsourcing of the supply chain. In this framework logistics services are divided into basic and value-added logistics services.

The fourth element of this framework is the service matrix, which was illustrated in chapter 2.1.2. Service matrix plays an important role in this framework: the aim is to position logistics services on the matrix and derive the recommendations for future logistics service offerings based on the matrix. Service matrix helps to determine whether current service offerings are on the efficient area of the matrix.

Finally, the fifth element of the framework is the recommendations for logistics service offerings. These recommendations are based on the service matrix and future business environment perspectives.

3.2 Illustration of Case Specific Framework and Research Questions

The framework for analyzing logistics service needs illustrated above was implemented to this study. Figure 3-2 presents the details of the framework used as a guideline for the empirical research. A few sub elements are added into this framework. In this chapter the sub elements for each section of the framework are first defined. In addition, the connection

between sub elements and research questions is explained. The final questionnaires can be found in Appendices A (English version) and C (Russian version).

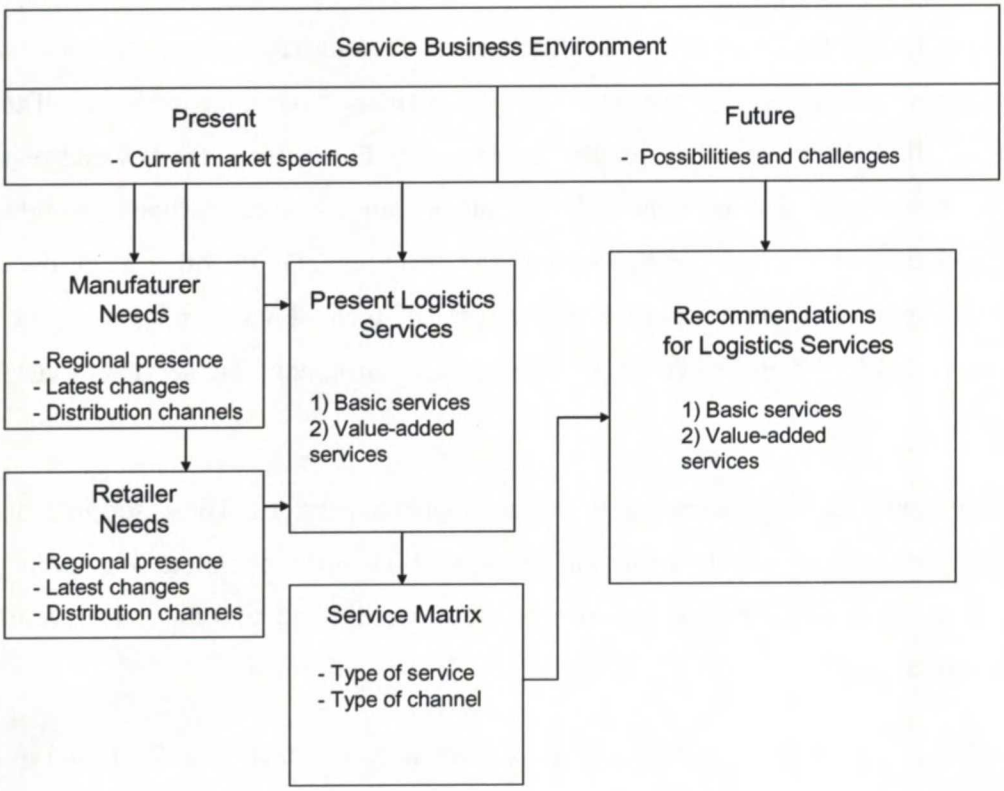

Figure 3-2 Framework for analyzing logistics service needs on the Russian electronics market

Manufacturer and Retailer Needs

These two groups usually order logistics services from a logistics service provider. Each manufacturer and retailer has their own unique supply chain with different players included. Understanding the structure of a supply chain helps to create and execute appropriate services for a manufacturer.

In an example case (Figure 3-3) a manufacturer (M) contracts with a logistics company to outsource some logistical function, for instance transportation. The logistics company executes the service and transports the goods to a retailer (R). In this example, the factory of M is located in Malaysia and the target country, where R is located is Germany. The retailer

is close to the end customers, German consumers. Thus, R has better understanding of the target market and knows the preferences and needs of the customers. In addition, the retailer might have its own wishes and ideas for service improvements. However, the logistics service is ordered by a manufacturer, but the communication and cooperation is mostly between the manufacturer and the logistics service provider. In other words, a lot of important information is lost in this supply chain. Thereby, in this framework both parties, the manufacturer and the retailer, are included. It is also interesting to examine whether there are significant differences in the opinions of these two elements of a supply chain.

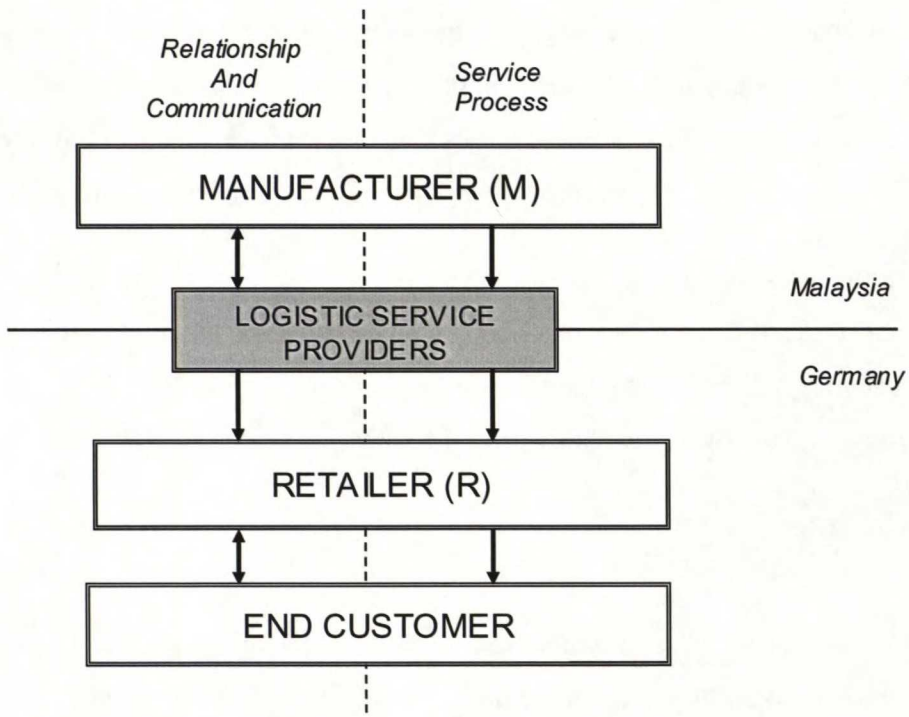

Figure 3-3 Information and service process flows

A set of questions concerning manufacturer and retailer needs was created. Questions in the second section of the questionnaire (Appendices A and C) were formed in order to determine the structure of a supply chain as well as the players it includes. In this thesis, the aim was to find out whether there are similarities in the supply chains of different electronics manufacturers, for instance whether the manufacturers have direct deliveries, how the transportation is typically organized or what are the locations of intermediate warehouses of

the manufacturers. Thus, questions concerning regional presence, distribution channels and the latest changes of the companies were formed.

Business environment (present and future)

The business environment is the second element of this framework, and it affects all the other elements either directly or through the other factors. The environment is divided into two parts: present environment and future possibilities and challenges of the environment. Physical environment creates boundaries for the activity of a company. On the other hand it creates possibilities for expansion of services. In order to provide a comprehensive logistics solution, a service provider has to piece together the entire business area of a customer. Especially new evolving market areas include market specifics and challenges. Knowing these characteristics of a market is extremely important to a service provider. Moreover, future prospects of a business environment provide an insight into rising service trends.

In order to picture the present business environment, a set of question was formed. The interviewees were asked to tell their opinions about the future development of the market. The purpose of this information was to familiarize the logistics service provider with the industry and its structure. Moreover, the challenges of the market were asked in the very end of the questionnaire.

Present logistics services

Also the offerings of current logistics providers affect the demand for logistics services. The level of partnership and cooperation has an influence on the manufacturer's willingness to seek for the other options for services. Moreover, the degree of outsourcing of logistics functions may vary in different companies and countries. On top of variation in outsourcing degree also the form of outsourcing may vary: some companies tend to seek partners in order to outsource the entire supply chain, while others simply purchase single services. Usually it is those more deep partnerships that have space for value-added services.

A set of questions concerning the mapping of the logistics service offerings was created. The questions were divided into two parts: questions concerning basic logistics services and value-added logistics services. The aim was to investigate the degree of outsourcing of basic

services in Russia. On the other hand, the idea was to find out the level of familiarity, purchasing and future needs for value-added services. Eight logistics value-added services were chosen to the questionnaire with help of HSE supervisors and Itella's representatives. These questions about value-added services investigate which services are in the interest of potential customers now and in the future. In addition, the information can help a service provider to form attractive service complexes.

Service matrix

In this study the service matrix was exploited in order to derive recommendations for future logistics services. Questions in sections 3.3 and 3.4 (Appendices A and C) were created for this purpose. The objective of these questions is to locate the services on the matrix and observe whether the existing type of channel is appropriate for the type of service. Next, the logic behind the questions is justified.

In order to position current service offerings on the service matrix, criterion for both variables (type of service and type of channel) was created (Table 3-1). Firstly, type of service was pursued to define by the degree of complexity of service. Moreover, the risk level that is involves outsourcing was taken into account. In addition, criteria for customization of a service, flexibility of a service provider and type of relationship with service provider were created. For example, mass transaction is a simple service outsourcing, which involves low risk for a company. Moreover, typically mass transaction service is a standard service (low customization and flexibility) and the relationship between service user and service provider is quite distant.

Secondly, four criteria for the type of channel were formed. Based on (1) the number of intermediators in the service process, (2) the degree of involvement of a customer in the service, (3) the relationship between a service buyer and service provider and (4) the communication channel of these two parties, the type of channel was meant to be found. For instance, market network is fairly straightforward as a type of channel: it is typically self-service that includes no intermediary in the service process. In addition, the relationship between a service buyer and a service provider is distant and most of the communication is based on IT-solutions. Based on these criterions, the research questions were formed.

Table 3-1 Criterion for positioning of effective services

Type of service	*Mass transaction*	*Standard contracts*	*Customizes delivery*	*Contingent relationship*
Complexity of service	Simple	Some complexity	Some complexity	Complex
Customization	Very little	Little	Customized	Customized
Risk	Little	Low	High	High
Flexibility	None	Little	Some	Flexible
Relationship	Distant	Distant	Close	Very close

Type of channel	*Market network*	*Service personnel*	*Agent / alliance*	*Internal hierarchy*
Intermediation	Minimal	Some	Some	Maximum
Involvement of the customer	Self-service	Little	Little	Internal
Relationship	Distant	Distant	Close	Very close
Communication	Mostly IT	Phone/Fax/E-mail	Face-to-Face	Face-to-Face

Recommendations for logistics services

Finally, the recommendations were meant to be derived based on the service matrix and the other information collected from the interviews.

3.3 Data Collection and Analysis

In this study the interviews were used as the main method for data collection. This method was chosen in order to receive as much information of the target market as possible. The interview forms were structured with the help of several researchers from both HSE and Itella Group. Interview forms were translated into three languages: Finnish, English (Appendix A) and Russian (Appendix C). A total number of 13 interviews were conducted each lasting in average of 45 minutes. Most of the interviews were executed during two research visits in Moscow, Russia in December 2007 and February 2008. In addition, three of the interviews were carried out in Helsinki, Finland.

A total number of 32 pre-selected companies operating in Russia were contacted in order to schedule the interviews. Pre-selection was made in cooperation with Itella representatives. The object was to collect the information about the logistics market from the most interesting companies in the opinion of Itella. 20 of these contacted companies were electronics manufacturers and 12 electronics retailers. Eventually, 9 interviews were scheduled with manufacturers and 4 with retail companies. One of the manufacturing company's representatives was interviewed twice, because the questionnaire was only at the pre-test

stage at the time of the first interview. The original plan was that the number of the interviews could be divided in half between these two groups, but unfortunately, only 4 appointments could be arranged with the retailers. Thus, the number of manufacturers was larger.

Nearly all manufacturing companies were Western enterprises that operate via subsidiaries in Russia. Only one manufacturing company was totally Russian based enterprise, whereas the retailers were mostly Russian companies. The interviewees were responsible for logistics functions of the companies. A complete list of the interviewees and their spheres of responsibilities can be found in references. Two of the interviewees wished that neither their names nor the companies they work for would be mentioned in the thesis.

The questionnaire themes were given to each interviewee in good time beforehand with the purpose of the interviewee to familiarize oneself with the themes of the interview. Each interviewee was interviewed individually, and Russian respondents were interviewed in Russian language. All the respondents were asked the same questions. However, some questions were answered in more detail than other. The interviews were recorded in order to avoid the pitfall memory lapses and to allow for thorough analysis.

The interviews were transcribed based on the recordings, and the transcriptions were further compiled into an excel database to allow for efficient analysis. The answers were compared to each other and the diversities as well as similarities were highlighted, and the main details and most important issues were picked from the transcriptions to be described in this study.

The next chapter discusses the results of the interviews and summarizes the main points. Also a few recommendations are given at the end of the chapter. First, however, the case company is introduced as well as its three business groups and Russian subsidiary.

4 CASE: LOGISTICS SERVICES IN ELECTRONICS MARKET IN WESTERN RUSSIA

This case study was conducted for Itella Group (former Finland Post Corporation), especially for Itella Logistics business group in order to test the theoretical framework of this study and also to give to the company recommendations for logistics service offerings on the Russian market. This chapter seeks to attend to the research objectives set for the empirical part of this study. The first objective for the empirical part was to study the possibilities and challenges that an emerging market provides from the logistics service provider point of view. In addition, the objective was to track the basic and value-added logistics services that are appreciated by logistics service users on the Russian market.

This chapter starts with a brief company illustration of Itella Group and its Russian subsidiary OOO Itella. The main focus of this chapter is, however, on the interpretation of the research results in the sections 4.2-4.6. The last part of this chapter is dedicated to recommendations based on the collected information.

4.1 Company Overview – Itella Group

The case study of this thesis was conducted for Itella Group. The company is divided into three business groups: Itella Mail Communication, Itella Information and Itella Logistics. Next, a brief company presentation of Itella Group and three business groups is given. In addition, also the Russian subsidiary company OOO Itella is presented.

4.1.1 Itella Group: Efficient Logistics Services in Three Business Groups

Itella Group is an intelligent logistics service company providing services for managing the customers' information and material flows. The Group operates in ten Northern European countries, providing consumer services under the Posti brand in Finland and corporate services under the Itella brand on international level. With a staff of almost 25,000, it posted consolidated net sales of EUR 1,688 in 2007. Itella serves 250,000 corporate customers and the Post some 2.4 million households in Finland.

The Group's operations are organised into the following three business groups: 1) Itella Mail Communication, 2) Itella Information and 3) Itella Logistics. Figure 4-1 shows the division

of net sales of the business group in the fiscal year 2007. The main responsibilities of each business group are illustrated in following:

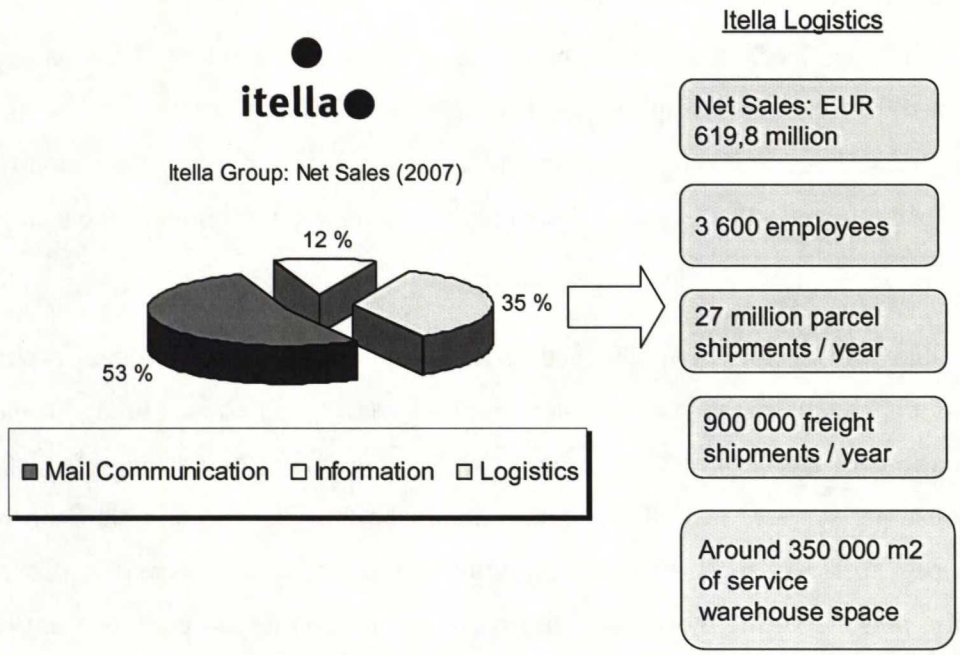

Figure 4-1 Itella Group and Itella Logistics in numbers

Itella Mail Communication provides letter, direct-mail and magazine/newspaper delivery services in Finland and on a global basis through partners. As a part of a group renowned for its intelligent logistics services, Itella Mail Communication develops new, more versatile solutions for both conventional and electronic communication.

Itella Information provides corporate customers in nine countries with solutions for boosting their information flow management. It receives, processes, converts, stores, archives, channels and transmits information on behalf of its customers in both printed and electronic form. Its services are related to document communication and document management.

Itella Logistics is a service logistics provider in northern Europe which operates elsewhere through partners. Its services encompass freight and forwarding, contract logistics and parcel services. Itella's intelligent logistics solutions can be integrated directly with the customer's

own information systems. This research was carried out particularly for Itella Logistics business group. Some numbers of the unit are presented in the Figure 4-1. Itella Logistics has eight subsidiaries through which it operates in Finland, Sweden, Norway, Denmark, Estonia, Latvia, Lithuania and Russia.

Lately, Itella Logistics has further strengthened its position as one of the leading logistics service providers in Northern Europe by the acquirement of Kauko Group. This acquisition complements Itella Logistics' service range through Kauko Group's solid expertise in international road, air and sea freight, and enables the Group to implement global transport solutions.

On the 1st of June 2007 Itella Group changed its name from former Finland Post Corporation to Itella. This change of name was realized because of diversified and internationalised business operations of the Group. Today, the group operates under two strong brands: Itella and Posti. Consumer services in Finland remain under the familiar and reliable *Posti* brand, reflected in post offices, mail carriers, mailboxes and consumer websites. Consumer communication and marketing, corporate customers and international operations are served by *Itella*.

4.1.2 *OOO Itella – Logistics Services on the Russian Market*

Itella Group operates in Russia through the affiliated enterprise OOO Itella. This Russian subsidiary was established in 2006, and in a relatively short time it has been able to attain a state of solid logistics service provider on Russian market. At the moment the company provides logistics services including warehousing, terminal and value added services in Moscow. The company opened its first warehouse of 20 000 m2 in Moscow in March 2007, and for the moment it serves several international customers. The company plans to open the second warehouse in Moscow during the spring 2008. In addition, a new warehouse will be opened in St Petersburg in May 2008. In total, the company will control around 50 000 m2 of warehouse space in Moscow and St Petersburg.

The purpose of OOO Itella is to provide comprehensive logistics solutions based on the combination of the required electronic and operational services integrated into well-performing entities. The company has an ambitious plan to expand the warehouse space to as

much as 200 000 m2 during the following few years (Päivinen 2008, 17). The starting point for this Russian subsidiary of Itella has been the Moscow and St Petersburg regions. However, according to the Manager of Itella Logistics, Vesa Vertanen, in the future it is possible that the company will expand also to other regions in Russia (Päivinen 2008, 18).

The aim of this research is to give the company recommendations how it should develop further its logistics service offerings in Russia. A total of 13 interviewees were conducted in order to find the answer to the research question. Next chapters describe the outcomes from the analysis of interviews collected from various electronics manufacturers and retailers operating Russia. These chapters are organized according to the elements of the theoretical framework. In the beginning of each chapter a short summary of research results according to each framework element is given.

4.2 Manufacturer and Retailer Needs

The description of research findings starts with the first element of the framework - the needs of manufacturers and retailers (Figure 4-2). Manufacturer and retailer needs are divided into three sub elements: regional presence, latest changes and distribution channels.

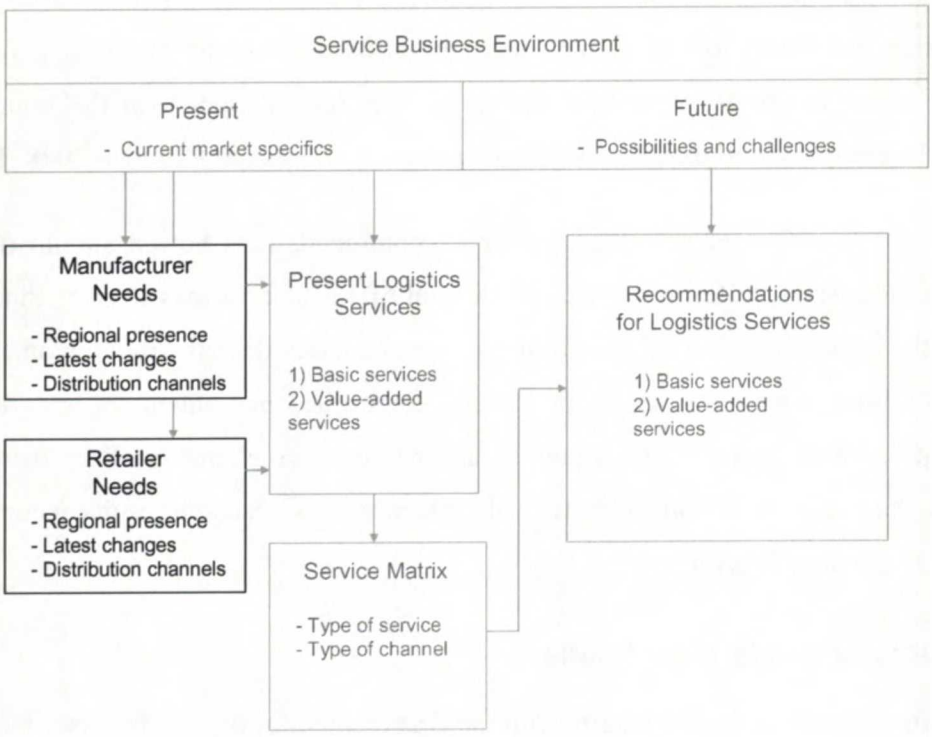

Figure 4-2 Manufacturer and retailer needs in the framework

Research reveals that most of the electronics products are first delivered to Moscow and thereafter across the Russian regions. In addition, retailers have better knowledge about the final destinations of the products than the manufacturers. Moreover, two clear trends can be seen on the market: the change of distribution channels and increasing transparency of business. In general, electronics market in Russia has experienced strong growth over the past five years, and thus there is evident need for logistics services on the market. Next, these research results according to manufacturers' and retailers' needs are discussed more in details.

4.2.1 Distribution of Sales of Electronics Products

According to the answers given by the interviewees nearly 50 per cent of their electronics products on the Russian market are sold in the Moscow region. However, there was a significant difference between the numbers given by manufacturers and retailers. Manufacturers perceived that as much as 61 per cent of the total sales volumes in Russia are gained from Moscow, whereas the average sales percentage in Moscow given by the retailers

was only 28 per cent. St Petersburg was clearly behind the Moscow region in sales volumes reported by the interviewees. There was no significant difference in the numbers given by manufacturers and retailers: St Petersburg's share of sales was 13 and 16 percent, respectively. Table 4-1 illustrates the average distribution of sales in Russia for both groups individually.

Table 4-1 Distribution of sales volumes on the Russian market

	Manufacturers average (n=8)	Retailers avarage (n=4)
Moscow	***61 %***	***28 %***
St. Petersburg	***13 %***	***16 %***
Elsewhere in Russia	***26 %***	***56 %***

Interestingly, according to the manufacturers only around one third of their products are sold elsewhere in Russia, while the retailers' answers suggest that more than half of their sales volumes come from outside Moscow and St Petersburg's regions. This difference in the numbers stated by manufacturers and retailers results from the fact that most of the products delivered to Moscow by manufacturers are further delivered by retailers across the country. Thus, only a share of manufacturers' products is actually sold in Moscow.

In general, the manufacturers seemed to have relatively little information about the distribution of their products on the market. According to one of the interviewees:

> *"Basically, we import the products to Russia, and our wholesale and retail partners take care of the distribution across the country. Unfortunately our partners do not share the information about the final destinations of products with us. All we know is that according to the general statistics around 30 per cent of the total electronics products in Russia are sold in Moscow. How the dealers distribute the products further to other regions is unknown to us."*

In addition, one of the manufacturing company's interviewees could not estimate the distribution of sales, because this information was only available to marketing department in this particular company.

4.2.2 *Quality Products and Strong Growth*

Interviewees were also asked to describe the changes their companies have been through in Russia over the past 3 years. Similar comments could be found in the answers of both groups. According to the interviewees, the product assortment of electronics has not changed much during the past years. Meanwhile, the preferences of the Russian consumers have shifted towards high quality products. This was mentioned by three representatives from manufacturing companies. However, there was also an opposite opinion - one of the interviewees commented that the first priority for a Russian consumer is the price, quality is not that important to the consumers. This divergent opinion can be explained by the fact that the products and selling channels of the studied companies were different, and thus the demand and consumer groups for the products may not be similar.

Interview results also revealed that the electronics market in Russia has gone through a rapid growth over the past few years. When asked about the latest changes on the market, 6 out of 8 interviewed representatives from manufacturing companies spontaneously told that their companies have experienced strong growth over the past three years. On average the volume growth rate for this group was around 15-20 percent per year. Moreover, similar answers were given by the retailers: all the retailer interviewees mentioned a strong growth as one of the biggest changes lately. In addition, growth estimates given by this group were somewhat bigger: the range of the volume growth rate was between 25 and 50 percent per year.

4.2.3 *Change in Distribution Channels and Increasing Transparency*

According to the interviews, there were two evident trends on the Russian electronics market. First, the focus of the market has changed towards sales via wholesale and retail stores. In other words, distribution channels have changed over the past three to five years significantly. Earlier, a great deal of the consumer electronics products in Russia were sold on traditional open-air markets and there were no controlled sales channels. Today, a typical Russian customer prefers to shop in a retail chain or a specialized shop. According to one of the interviewees:

> *"As Russian consumer choice is getting more sophisticated, they prefer to shop in specialised stores and chained supermarkets. Today a Russian customer demands higher quality products and guaranteed customer service, and electronics retailer stores have*

benefited from this change in consumer preferences."

The second clear trend on the market has been the change to direct import of the products. Previously, most of the consumer electronics products, as well as many other consumer goods, were imported to Russia via a third country and money transactions took place outside Russia. This resulted from high customs tariffs for direct import to Russia and led to many arrangements in order to avoid high custom payments. However, the answers of interviewees clearly suggest that the trend is towards a transparent business. More than half of the interviewees spontaneously named change to direct import as one of the greatest changes for their companies during the past three years. The following benefits of direct import were mentioned: control over the entire supply chain, transparency of business and quality assurance. Furthermore, two of the manufacturing companies believed that they were rather forced to shift to direct import, in order to keep up with their competitors. In summary, the tendency on the consumer electronics market in Russia is towards direct sales and a transparent business.

4.3 Present Business Environment

The second element of the framework is service business environment and its present state (Figure 4-3). This element of the framework gives an overview of the current market specifics and aims to provide an insight into how the transportation and warehousing is organized in Russian market at the moment. In addition, this chapter covers a few special characteristics of the market.

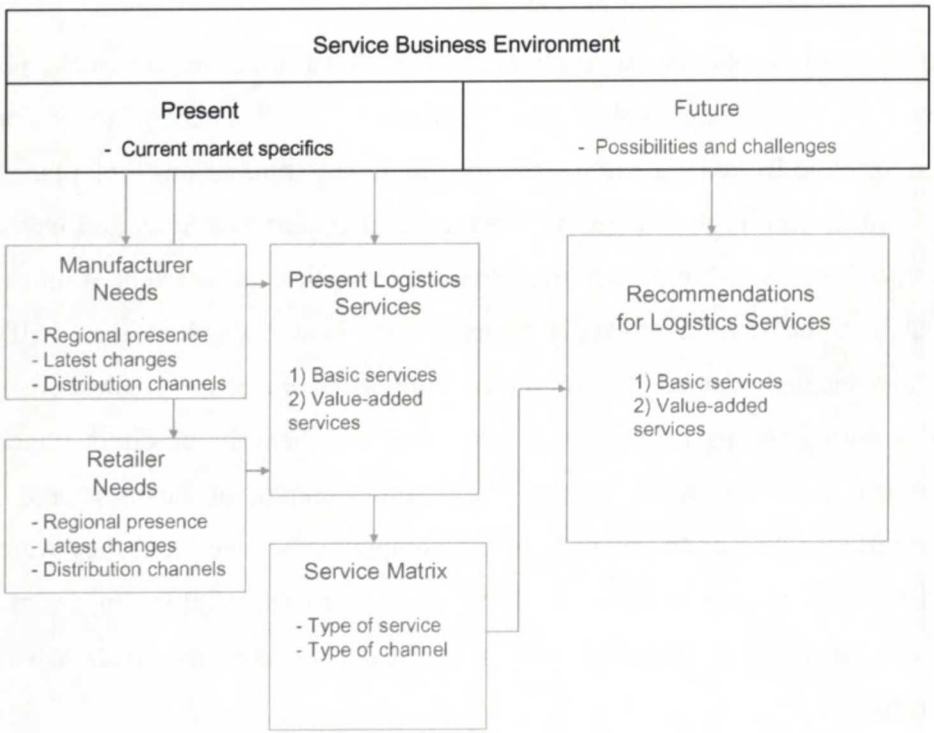

Figure 4-3 Present state of service business environment in the framework

Research revealed that there are three main routes for delivering the products from manufacturing origin (typically located in Asia) to Russia: 1) via Finland, 2) via central Europe and 3) direct deliveries to Russia. According to the results the most attractive route at the moment is via Finland. In addition, the interviews revealed that customs duties are often bypassed or manipulated. These arrangements to avoid customs duties have developed inefficient logistics methods. Next, these research results according to service business environment and its present state are discussed more in details.

4.3.1 Transportation: Three Routes from Asia to Russia

Most of the manufacturing of electronics products takes place in the Far-East. Seven out of eight manufacturers responded that the production of their products is located in Asia. Several locations were mentioned: China, Taiwan, Malaysia, Singapore to name just a few. However, not all production today is located in the East: one manufacturer had also 40 manufacturing factories that were all located in Europe. Two manufacturers also pointed out that in addition to the Asian factories they still have a few production plants in Europe. In

their opinion, this has been a strategic decision that allows them fast delivery times to the Russian market.

The interviews revealed that there are three main routes for delivering the products to Russia. Figure 4-4 visualizes these product flows.

The first route: via Finland

According to the sample of this research, the most popular is transit traffic via Finland. The products are transported from Asia by sea either via Central Europe of directly to one of the ports in Finland (Kotka and Hamina mentioned during the interviews). The products are further delivered to either the manufacturers' or the retailers' warehouses in Finland. Over half of the manufacturers interviewed answered that they deliver their products to Russia through Finland. Manufacturers named several benefits in this route via Finland: fast, reliable and predictable delivery times, effectiveness of the route and safety of the deliveries.

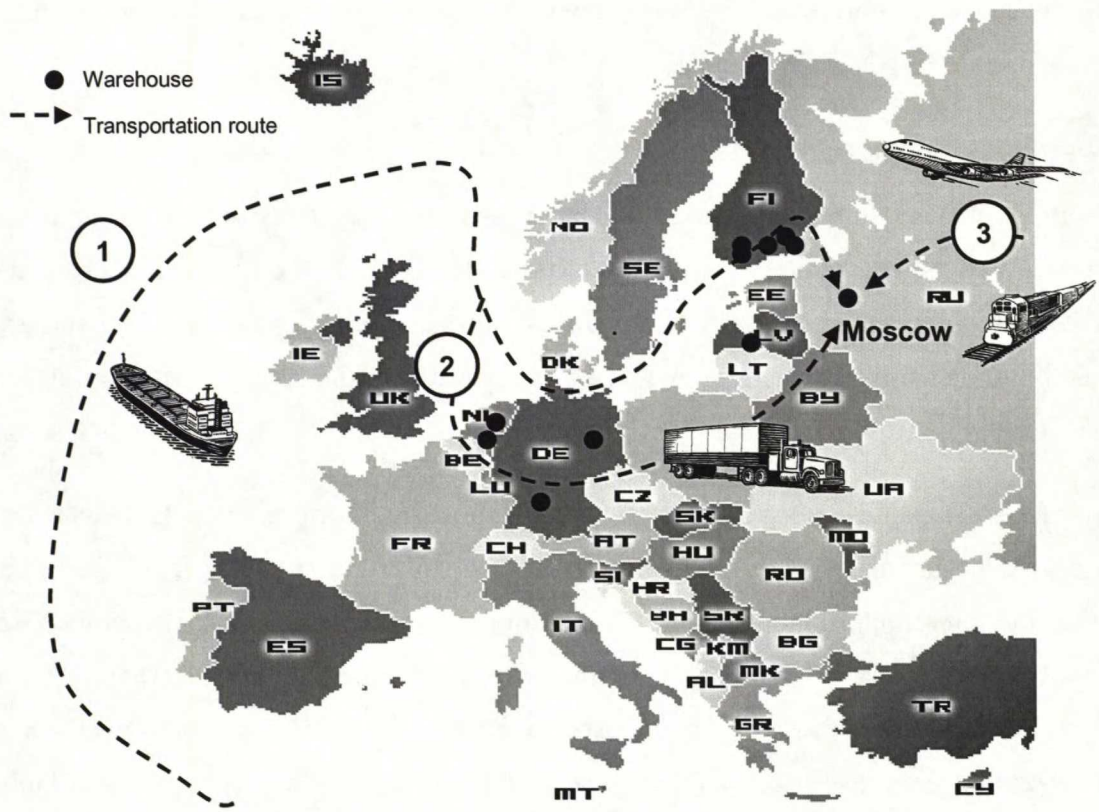

Figure 4-4 Transportation routes and warehousing of electronics products to Russia

The second route: via Europe

The second option is a delivery from Asia via European ports either by trucks through East-Europe or by sea directly to St Petersburg's port. On this route the companies store the products in European central warehouses, from where the products are further delivered to Russia. Geographically this route is shorter compared to the first route, but according to the respondents it is also in many ways more problematic. Two of the respondents mentioned that especially the port of St Petersburg is often very unpredictable. As one of the interviewees stated:

> *"The biggest challenge is not how to get the goods to St Petersburg's port, but rather how to get them out of the port. It is impossible to predict how long the formalities in the port will take, and we can not afford these delays. We don't want to be involved with any illegal activities that could help us fasten customs formalities. Thus, we prefer other delivery options. "*

Half of the interviewed manufacturers also deliver their products from the central warehouses in Europe by trucks or rail roads via East Europe to Russia. By doing so they avoid the congested port of St Petersburg, but road transportation is more expensive and is a less safe option.

The third route: direct delivery

The third route is a direct delivery from factories to Russia. None of the manufacturers mentioned that they have direct deliveries to Russia. However, half of the retailers responded that their products are directly delivered to their Russian warehouses. These deliveries are carried out either by train, or in urgent cases by air traffic, from Asian production plants to Russia, mostly to Moscow.

Some of the companies interviewed use only a single route out of three explained above for their deliveries, but also several companies transport their products to Russia utilizing two or even all the three routes simultaneously. According to the interviewees some deliveries can not wait several weeks to arrive by sea transportation, and the companies have no other option but to transport the products by expensive air freights. The interviews refer to the conclusion that, from the three routes illustrated in the Figure 4-4, transportation via Finland is at the moment clearly the most popular route. However, many interviewees believed that

in the future Finland will lose its position as "Russian central warehouse" and direct deliveries from manufacturing origins will significantly increase. This is closely related to the companies' plans to shift to direct import to Russia.

4.3.2 *Intransparency of Customs Formalities*

There are two options how the transportation from the European warehouses (Finnish or central European warehouses) to Russia is organized: either a manufacturer takes care of the delivery or a retailer/dealer picks up the products from a warehouse and delivers the goods to Russia. Half of the manufacturers interviewed controls either partly or completely the deliveries of electronics products from their central warehouses to Russia. In these cases the companies are responsible for customs formalities related to import of goods.

The second option is that the dealers of manufacturing companies pick up products from manufacturers' warehouses, and are thereby responsible for formalities related to importation of products. These two manners are quite common for importation to many other countries too, but in import to Russia it includes its own "spice". When dealers take care of transportation to Russia, manufacturers have no control over their products after the goods leave the warehouses. In addition, customs duties are often bypassed or manipulated.

Unfortunately large-scale spread of corruption and shadow economy are phenomena characteristic to a country in transition. However, nearly all of the interviewees remarked that step by step the business is changing to a more transparent mode: "white customs", in other words fair customs clearance, catches on the market. This transformation towards transparency can be interpreted from the interviews.

4.3.3 *Inefficient Logistics*

Among other reasons, intransparency of business has led to different arrangements in order to avoid high custom payments. These arrangements again have developed inefficient logistics methods. Figure 4-5 illustrates this inefficiency as an example of delivery from Korea to Vladivostok. First the products are transported by sea way from Korea to Moscow. Further the products are loaded on a train and delivered to Vladivostok. In total, this trip may take 3-6 weeks.

Several interviewees believed that this inefficient mode of transportation and warehousing will decrease in the future, but still many deliveries will continue to circulate via Moscow. Interestingly, one retailer representative told that their company already has direct deliveries from Asian manufacturing plants to East Russian regions. According to him, the company has been able to shorten the delivery times notably and thus has been able to serve their customers better.

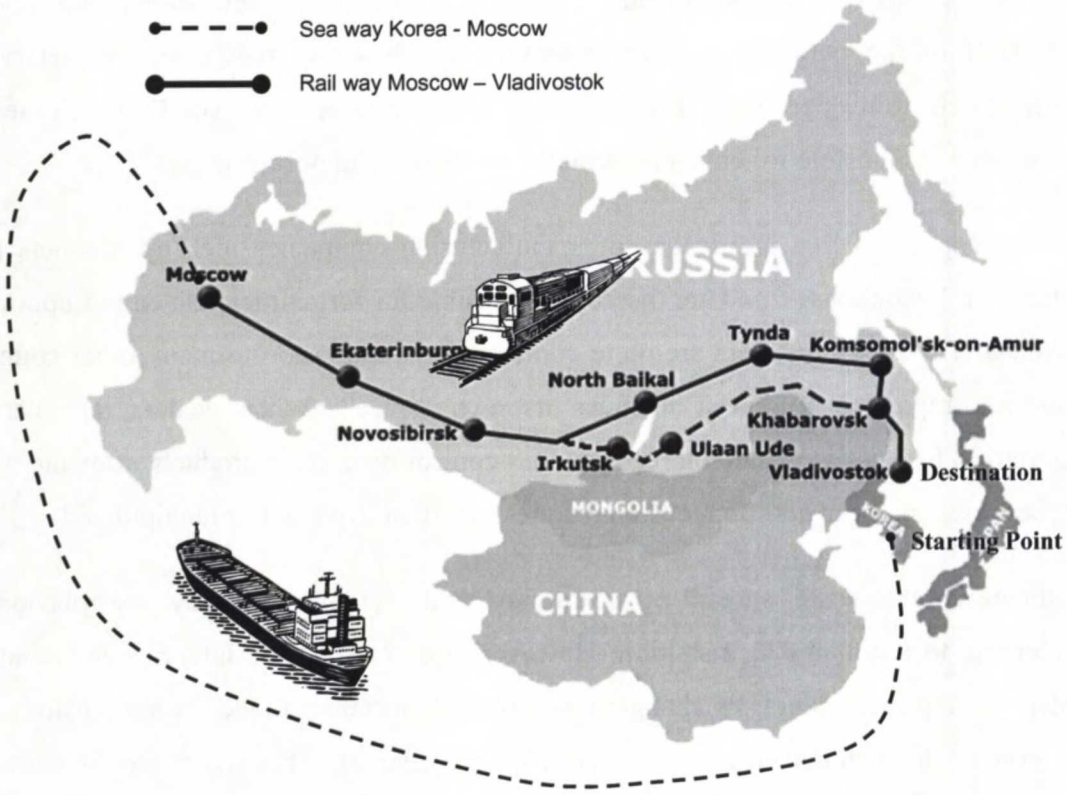

Figure 4-5 An example of transportation from Korea to Vladivostok

Another important issue that stood out in the interviews was the unanimous opinion of the interviewees that in the future the transportation routes and locations of warehouses in the Russian market will change. This was, once again, explained by increasing transparency of the business and the need for faster deliveries of products.

4.4 Present Logistics Services

The third element of the framework is present logistics services (Figure 4-6). This element is

divided into basic and value-added logistics services. Current state of basic logistics services is aimed to be defined by the degree of outsourcing. Value-added services are investigated by the determination of familiarity, purchasing and future needs for the services.

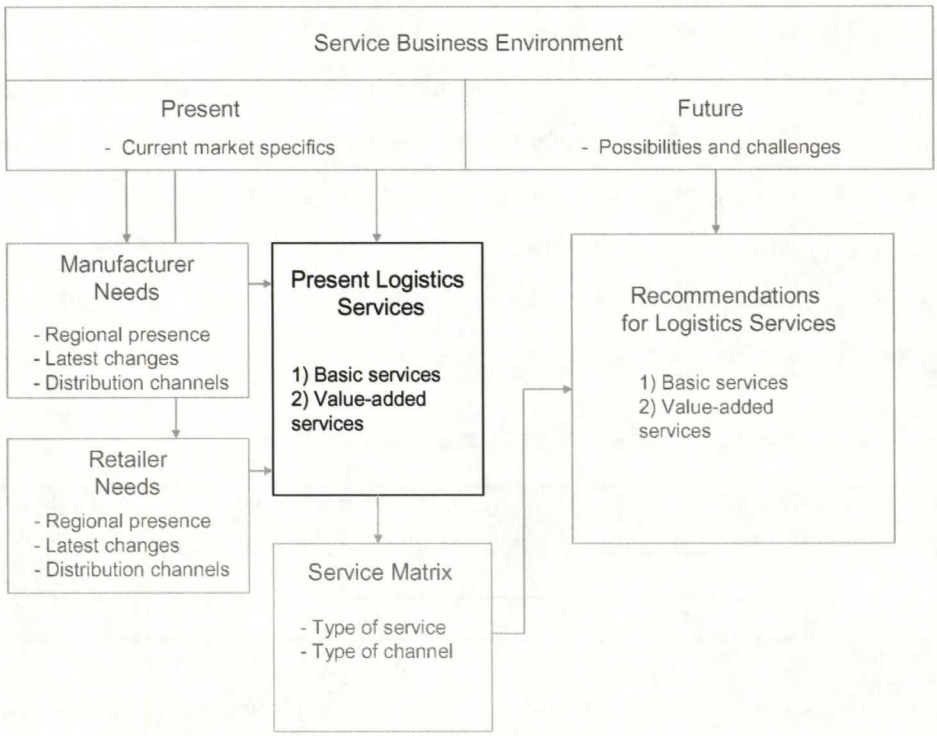

Figure 4-6 Present logistics services in the framework

Research revealed that most interviewees store their products in several locations. In addition, outsourcing of basic logistic services has become quite common in Russia. Interestingly, it appeared that typically logistics services are outsourced to several service providers. Moreover, logistics value-added services were quite familiar to the respondents. However, purchasing of these services is yet not popular in Russia. In addition, the research revealed that in the future there is need for such value-added services as reverse logistics, packing and formation customer specific sales lots. Furthermore, research revealed that Russian market is the most influential factor affecting the needs for logistics vale-added services. Next, these research results about present logistics services are discussed more in details. This section is divided into basic and value-added logistics services.

4.4.1 *Basic Logistics Services: Warehousing in Finland, Europe and Moscow*

Both manufacturers and retailers have warehouses in transit countries (Finland, Germany and other locations) and in Russia. Two-thirds of the manufacturing companies have an intermediate warehouse in Finland, from which at the moment their customers (dealers, wholesalers and retail companies) collect the products and transport them over the Russian border. In addition, a few of these manufacturers also have warehouses in other European countries, and only one company representative answered that they transport all their products from factories directly to dealers' warehouses with no intermediate warehousing in between. Table 4-2 illustrates the interviewees' answers regarding the locations of their intermediate warehouses. The table clearly shows that for this sample of companies, Finland is the most popular location for intermediate warehouses.

Table 4-2 Locations of intermediate warehouses

	Only in Finland	In other locations in Europe	In Finland and other locations	No intermediate warehousing
Manufacturers (n=8)	*4*	*2*	*1*	*1*
Retailers (n=4)	*3*		*1*	

In addition, both groups have warehouses, own and outsourced, in Russia. The warehouses of manufacturers are all located in Moscow, with an exception of one company that also has a small storehouse in the area of St Petersburg. Over two-thirds of the manufacturers and all retailers have warehouses in the Moscow region or its neighbouring area. It appeared that Moscow, as a location, plays an essential role for distribution of electronics products around Russia. As one of the retailers' representatives pointed out:

> *"All the products we sell are always first delivered to the central warehouse in Moscow. Even the deliveries to Vladivostok (located in East Russia, next to China and North Korea) are always first transported to the Moscow warehouse. This is very inefficient and environmentally harmful logistics, but it has become a tradition because of the lack of transparency of the business and inefficiency of customs services. In addition, it simply takes too long a time for the deliveries to arrive, and our business is suffering from long delivery times."*

4.4.2 *Outsourcing of Basic Logistics Services*

In order to form an idea of current logistics service offerings on the Russian market, the interviewees were given a list of basic logistics services and were asked to point out the

services they purchase and the services they perform in-house. Figure 4-7 illustrates the degree of outsourcing of basic logistics functions of electronics manufacturing companies interviewed.

What clearly stands out in the interview results is that outsourcing is very common for manufacturing companies. Over two-thirds of the companies have outsourced all the logistics functions. In addition, all the interviewees in this group stated that transportation, forwarding and customs clearance are handled by a logistics service provider. In this group, only distribution around Russia and warehousing were still partly in-house performed activities. Moreover, two of the respondents stressed that their companies have both outsourced and own warehouses. Interviewees also spontaneously commented that for them the price of a service is usually the most important criterion when outsourcing logistic

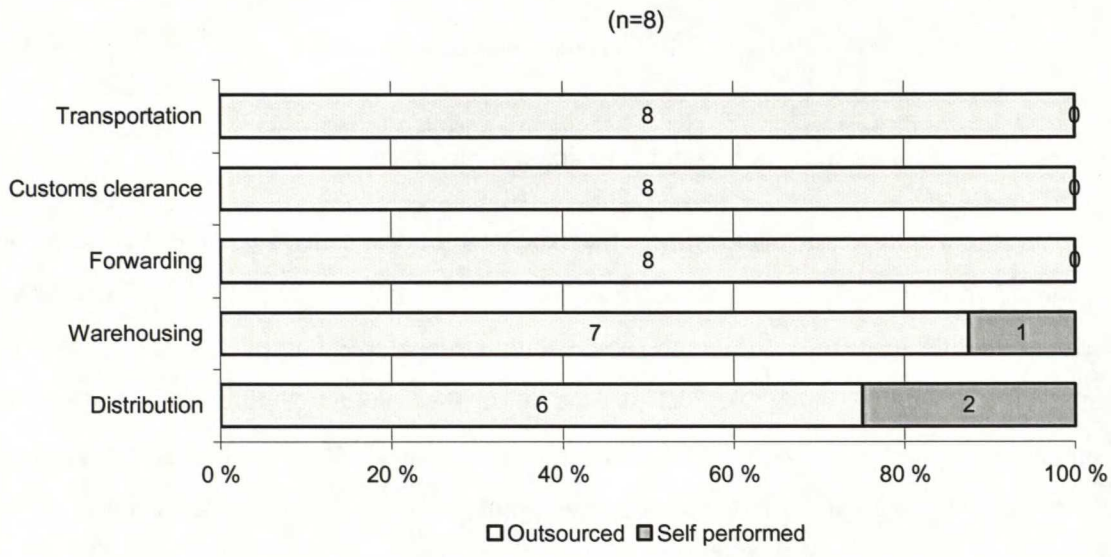

Figure 4-7 Outsourcing of logistics services of electronics manufacturers

As a comparison, Figure 4-8 illustrates the outsourcing of retailer companies. Compared to manufacturers, the degree of outsourcing is somewhat lower. Especially distribution is mostly a self performed activity for this group. In spite of the fact that most of the retailer companies have outsourced the transportation, warehousing, forwarding and customs clearance services, half of the respondents in this group said that to some extent they still

take care of these functions themselves. Moreover, only one representative from a retail company confirmed that all the logistics functions in his company are outsourced to a logistics service provider.

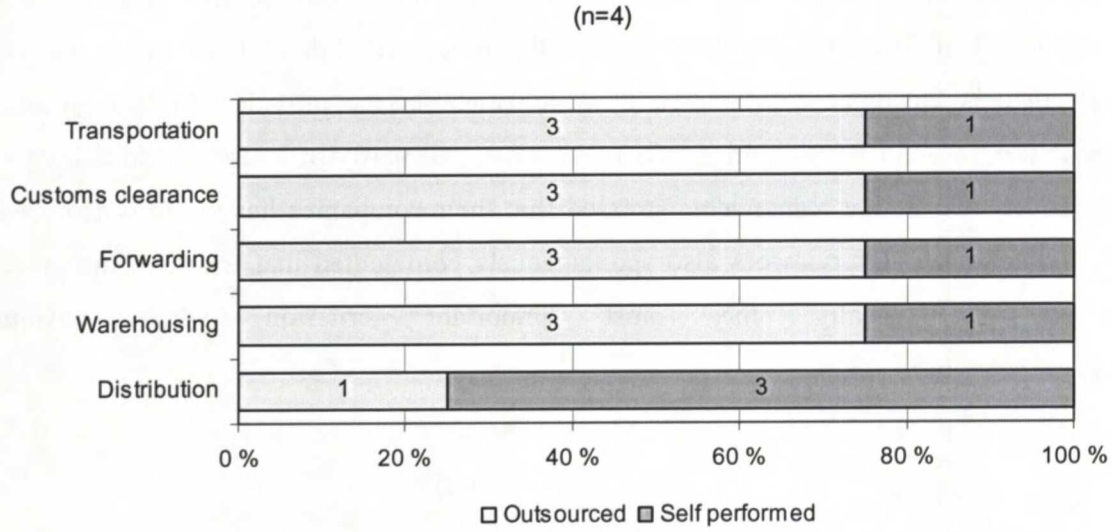

Figure 4-8 Outsourcing of logistics services of electronics retailers

The respondents were also asked whether those logistics functions they outsource are all purchased from a single company or from several logistics service providers. The answers of the respondents in both groups were consistent: none of the companies outsource logistics functions to a single service provider. Almost all of the companies purchase logistics services from a high number of logistics service providers, and only two of all the respondents emphasized that they actually try to keep the number of logistics partners as low as possible.

4.4.3 Purchasing of Services from Several Service Providers

The company representatives gave several reasons for purchasing of logistics services from several different logistics service providers. According to the interviewees the area of outsourcing is undeveloped in Russia. According to one of the interviewees:

> *"There are big Western companies, such as DHL and Schenker, which can provide services for the entire supply chain. However, these services are quite expensive and the quality of the services is not always guaranteed."*

Moreover, several other companies' representatives confirmed that the lack of quality in logistics services drives the companies to seek for the best combination of services from several sources. One of the retailers' representatives stated that there are no appropriate service providers that offer a full range of services. According to the same interviewee, the ideal situation for his company would be that one single service provider would take care of the entire chain from Moscow to Asia. Unfortunately, the interviewee stated, his company has not been able to find a such logistics partner.

The interview results revealed that it is very common in Russia, not only for electronics industry that logistics services are purchased from several logistics companies. As stated above, this is mainly because there is no single company on the Russian market that could provide all these services for appropriate price and quality level. This fact was stressed by two-thirds of the interviewees. In addition, the interviewees saw the reason for such behaviour in the structure of logistics market in Russia: there are a huge number of logistics companies on the market and most of them specialize in some individual function e.g. warehousing, transportation or distribution. This drives the companies to buy the services from several single sources.

One of the interviewees summarized the reasons for outsourcing logistics services to several different logistics service providers into three main reasons:

> *"We definitely want to have several logistics partners here in Russia, because 1) If it would be a one single company providing these services for us, it would be a huge risk, 2) When there is a normal competitive situation among logistics service providers, there is a good chance of negotiating the best prices for services, and finally 3) There is simply no one single company that has capacity to provide all the services to us."*

4.4.4 Logistics Value-added Services: Familiarity, Purchasing and Future Needs

The interviewees were asked whether they are familiar with the concept of logistics value-added services and if they purchase these services at the moment. The answers were somewhat inconsistent: the concept itself was unfamiliar to most of the interviewees, but the services listed were quite known. One of the interviewees commented that he had never heard of that term (Logistics Value-Added Services) in Russian. However, when the term was translated into English, the interviewee knew exactly what it meant.

Similar comments were heard from several other interviewees as well. In addition, similar insubstantiality of logistics terminology in Russian was perceived during other interview questions: many interviewees rather used English substitute terms during the interviews. Anyhow, around half of the interviewees in both groups commented that they are familiar with the concept of value-added services, but only one-third said that they are purchasing these services at the moment from their logistics service providers. Later, when the interviewees were given a list of different value-added services and asked whether they purchase the services, a clear majority commented that they do purchase these services.

The interviewees' familiarity with logistics value-added services is illustrated in Figure 4-9. The figure includes the answers of the both groups interviewed, the manufacturers and the retailers. In general, the degree of familiarity was quite high for all the services listed. However, one of the manufacturers' representatives was unfamiliar with all the other additional services except for security. This was basically because operational logistics was not in his sphere of responsibilities. Moreover, all those interviewees that were responsible particularly for the logistics of their companies were very familiar with the services. Interestingly, two of the interviewees commented that some of the services listed were not, in their opinion, value-added services. They felt that these services are rather basic logistics services that are automatically included in their service packages. This opinion was mentioned especially when talking about track-and-trace services and security.

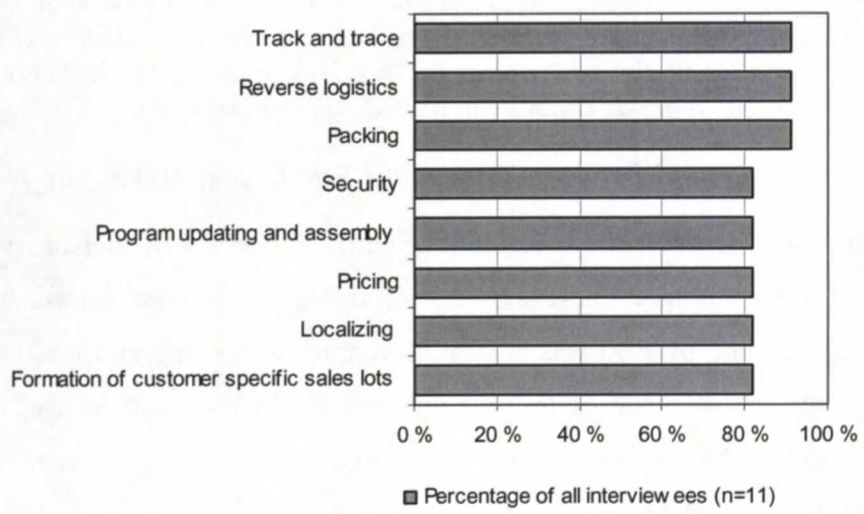

Figure 4-9 Familiarity with logistics value-added services

No significant difference could be found in the familiarity of different services, but reverse logistics, track-and-trace-services and packing were the most familiar services to the interviewees. One of the interviewees also stated that the term localizing was unfamiliar to him. However, when explained what this service includes he commented that this is quite a familiar service, and his company purchases this service from a logistics service provider at the moment. Once again, this comment confirms that terminology of logistics is not yet stabilized on the Russian logistics market. In addition, one of the interviewees commented the following about localizing:

> *"Previously the instructions for the products in Russian were sent separately to retail stores, and no other localizing was needed. Today the instructions and warranty lists are added already at the factories, because we know already at the point of manufacturing to which market the products are going to be delivered."*

In spite of this single comment, this was not the practice for every company. A few interviewees commented that localizing for their products takes place in central warehouses, either in Europe or Russia.

In addition to familiarity of logistics value-added services, the interviewees were asked whether they purchase these services at the moment. Figure 4-10 illustrates the degree of purchasing of these services. As stated above, the respondents were very aware of all the services listed. However, clear differences came out when asked to point out those services the interviewees purchase at the moment. Security appeared to be the most popular service to respondents' companies: slightly over half of the interviewees said that their companies purchase security services as additional value-added services. In addition, as much as three-fourths of the retailers commented that they purchase security services at the moment, whereas the number for manufacturers was somewhat smaller.

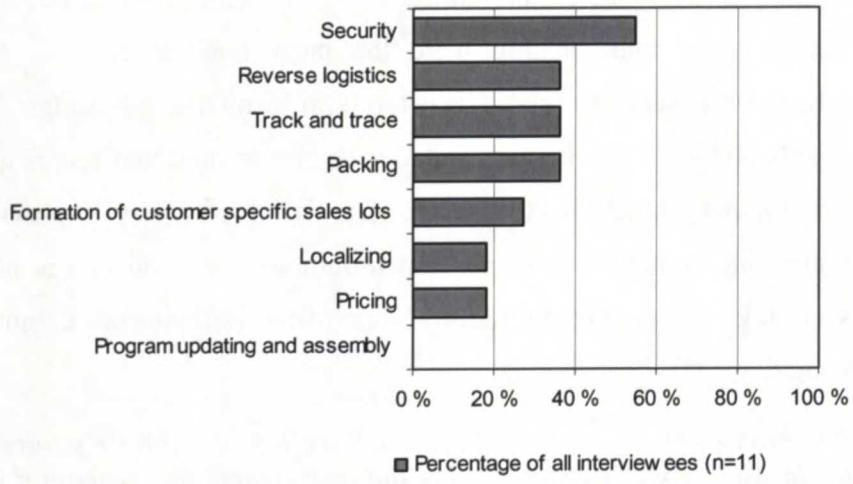

Figure 4-10 Purchasing of logistics value-added services

In addition to security, reverse logistics, track-and-trace services and packing were mentioned as the next most popular value-added services purchased - around one third of the interviewees purchase the services these days. Outsourcing of reverse logistics services seemed to be more popular among retailers: three out of four retailer interviewees commented that their reverse logistics is taken care of by an outsider logistics service provider. At the same time, only one manufacturing company's representative commented that these services are purchased from outside of the company. According to one of the interviewees:

> *"Quality of service means everything to us. In order to be a trustworthy company with high quality services, we have to ensure that returns and repairs of the products are taken care of properly and professionally. This is why we have outsourced this service to our logistics service provider that is specialized in executing this service."*

Some of the interviewees stated that they also purchase packing as a value-added service. One of the manufacturing companies' representatives said that they do not purchase packing service on a regular basis. According to this interviewee:

> *"Sometimes we have special needs for packing, which is often caused by our customers. For example a retail store wishes to have its own special packing instead of our packages. We have no other option but to purchase packing service and deliver the products to the retailer in those packages. Luckily our logistics partners are flexible to deliver this service to us. This is where we see that our logistics service provider truly adds value to our products."*

Less popular value-added services among interviewees were localizing, pricing, formation of customer specific sales lots and program updating and assembly. According to a few of the interviewees pricing and localization is often executed at the point of manufacturing and this is why at the moment there is no need to localize the products upon the arrival to Russia. In addition, one of the retailer interviewees made an interesting comment about pricing:

> *"We actually purchase this service from several logistics service providers. Partly because of the huge volumes it is not possible to outsource this service to one single service provider."*

Interestingly, none of the respondents said that they purchase program updating and assembly services at the moment. Apparently these services are too close to the companies' core businesses, and therefore outsourcing of core activities is too risky in the opinion of the representatives of these companies. In addition, these services typically require special technical skills from service providers' employees, and as it was noted in the previous chapter most of the services purchased by the companies do not require any special technical or engineering education.

The interviewees were also asked to point out those services that they believe their companies will need in the future. Figure 4-11 illustrates the future needs for value-added logistics services. Some of the answers were in line with the answers of the previous question. For instance, reverse logistics was clearly the most referred service. Moreover, whereas only one of the manufacturing representatives said that they do purchase reverse logistics services at the moment, practically all of the manufacturing interviewees stated that their companies will need these services in the future. In addition, one of the interviewees commented that at the moment the price for reverse logistics services is relatively high, and that is currently the main reason for the company not to purchase these services. The same interviewee believed that the price for these services will lower. Several interviewees also commented that they plan to outsource reverse logistics of their companies in the near future, within one to two years.

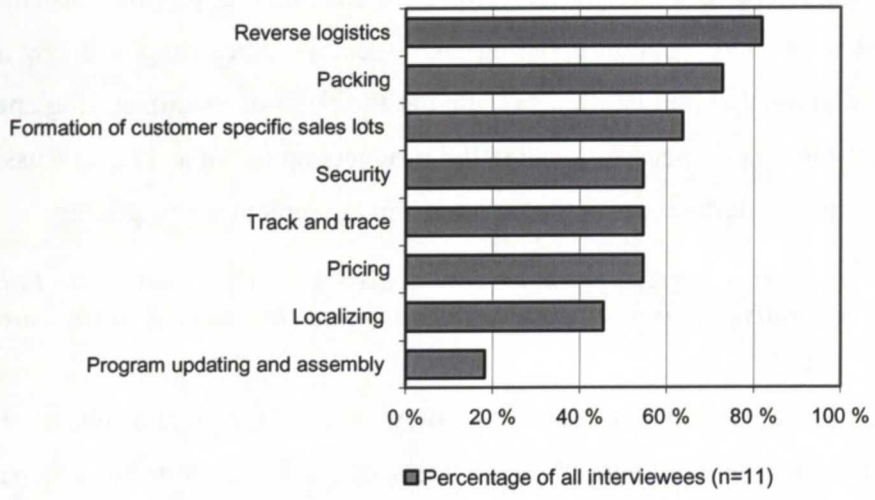

Figure 4-11 Future need for logistics value-added services

Packing was the second most popular value-added service mentioned. It was pointed out by over two-thirds of the interviewees. The interviewees commented that sometimes several different products are delivered in one delivery, and thus repacking of the products is needed. Surprisingly, formation of customer specific sales lots took the third place in the future needs of the companies. Many of the interviewees believed that in the near future the need for customized deliveries will significantly increase. This was explained by growing the demand of specialized electronics retail chains on the market.

According to the answers of the interviewees three least needed services were program updating and assembly, pricing and localizing. The same services were also those least purchased at the moment. In addition, one of the interviewees commented that if his company would ever consider the outsourcing of updating and assembly services, the cooperation with the service provider would have to be at quite a deep level. Interestingly, security services took only the fourth place in the future needs for value-added services, whereas it was clearly the most purchased service at the moment (Figure 4-10).

The interviewees were also asked if there are some other logistics value-added services, outside the list given, that they find useful for their companies. To great majority of the interviewees this was a difficult question: most respondents did not come up with any other services that could be needed. However, two other services were suggested: one respondent

commented that one of their current logistics service providers executes bundling services for the company. This service includes different consolidation of products, and it is typically a piecework ordered individually each time. The other service mentioned by another interviewee was weighing of products. According to this interviewee:

> *"Customs authorities are very strict about the weight limitations on the border of Russia, and this has caused many delays with our deliveries. We have been able to reduce these problems once our logistics partner started to weigh our products at its warehouse."*

In general, the interviews revealed that the best solutions for any logistics problems were developed with close cooperation between a customer and a logistics service provider.

4.4.5 *Factors Affecting the Needs for Value-added Services*

One of the objectives of the interviews was to find out the reasons that drive the needs for value-added services. Therefore the interviewees were given a list of different business environment factors and were asked to name two of those factors that influence the need for logistic value-added services the most (Appendices C and E, question 4.6). The responses of the interviewees are summarized in the Figure 4-12.

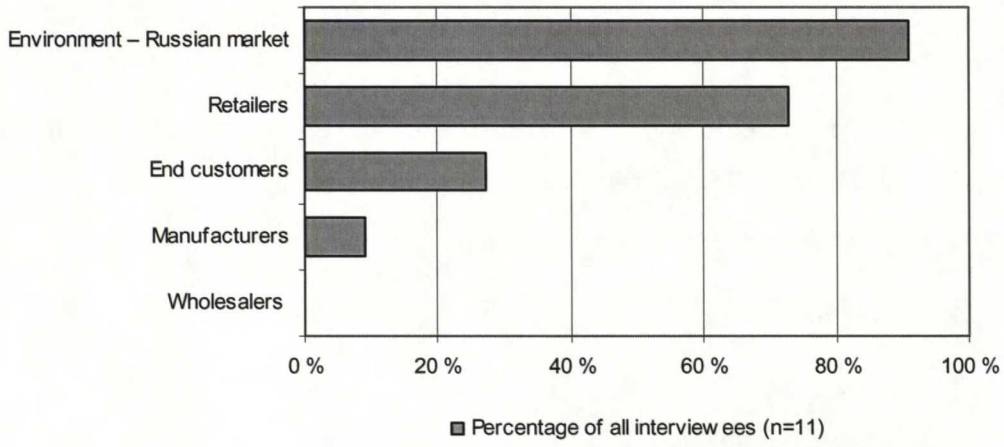

Figure 4-12 Factors influencing needs for logistics value-added services

Business environment - Russian market - was clearly the most common reason stated by the interviewees. Nearly all of the respondents named this factor as the most influencing on the needs for value-added services. Several reasons were given to support this choice: Legal

requirements in Russia and different customs formalities were mentioned by several interviewees. One of the interviewees commented that everything depends on the development of the Russian market. According to this interviewee, at the moment there are no signs of a turndown on the market. The other factor that stood out as a driving force for value-added services was the retail trade. Over two-thirds of the respondents agreed with that. According to the interviewees this group has quite a strong role on the Russian electronics market today. One of the manufacturing companies' representatives stated:

> *"Especially our retailers have demand for customer specific orders. The power of this group is further increasing. Five years ago, there were practically no retailers, but the situation has changed dramatically: the whole market structure has changed."*

Moreover, the interviewees emphasized that retailers are the only source of information from the end users of the products.

To sum it all up, logistics value-added services were quite familiar to the interviewees. However, purchasing of the services is at quite a low level at the moment. On the other hand, there is a clear demand for these services in the future, especially for reverse logistics and packing services. The interviewees also revealed that changes in business environment, Russian market in this case, affects the need for value-added logistics services the most.

4.5 Service Matrix

Service matrix is the fourth element of the framework (Figure 4-13). Based on the interviewees' answers according to type of service and type of channel current service offerings are placed on the matrix.

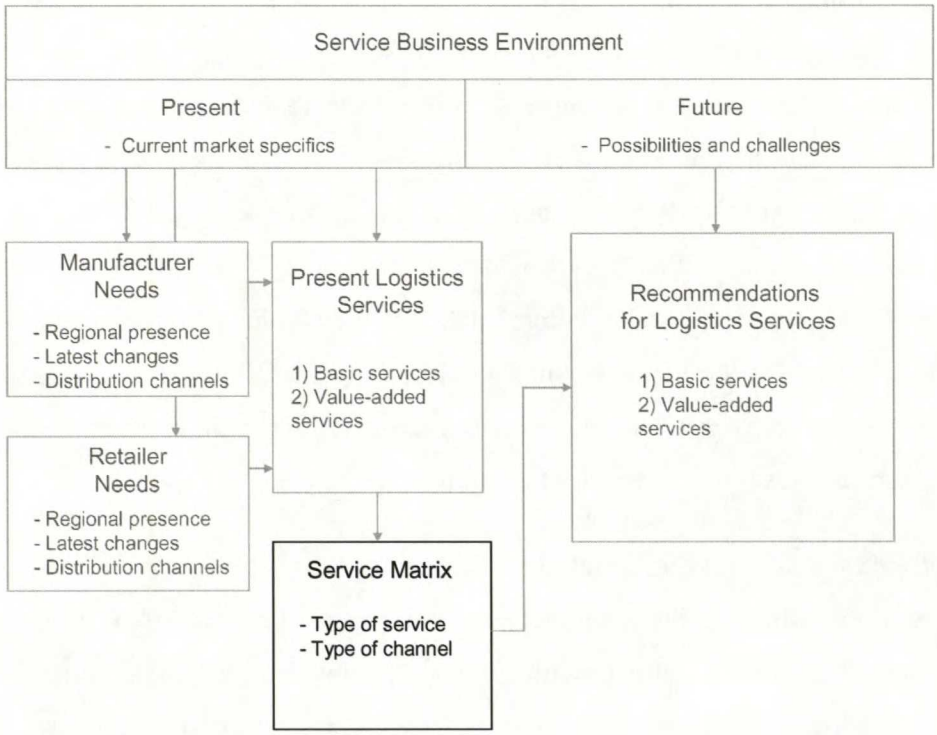

Figure 4-13 Service matrix in the framework

It appeared that the services are on the inefficient area of the matrix. In other words, Russian logistics sector faces problems of universal service. Next, these research results according to service matrix are discussed more in details.

4.5.1 Positioning Services on the Service Matrix

In order to position the logistics service offerings in Russia on the Service Matrix (Figure 2-5) the interviewees were asked a group of questions related to the execution of the logistics services they purchase at the moment (Appendices B and D, questions 3-3 and 3-4). The interviewees were not asked to evaluate different services (e.g. warehousing and transportation) separately. Answers for the questions were quite similar from all the respondents. Typically the services were executed in a service provider's facility and were realized by the personnel of a logistics service provider. In addition, the interviewees said that, in most cases there are also other companies' products in the facility. However, two respondents stressed that there are never any competitors' products in the same facility.

The sharing of information and especially the integration level of IT is closely related to the Service Matrix: knowing whether companies have integrated IT helps to define the type of channel in the matrix. Only two of the representatives from manufacturing companies said that they do share information with their logistics service providers using shared IT-programs. The number was clearly higher among retailers: three-fourths of the interviewed retailers' representatives stated that they do have common IT-systems with their service providers. One of the interviewees also commented that they have only partly integrated IT with the service provider at the moment, but they definitely seek to share more information in the future. Thus, the answers of the interviewees indicate that at the moment most of the companies use service personnel as a type of channel.

The interviewees were also asked about the type of services they outsource to logistics service providers. Over half of the manufacturing companies and three-fourths of retailers said that they have long term contracts with logistics companies. A typical contract was a long term agreement that is reviewed on a regular basis. Only two of the manufacturing companies' representatives stated that the logistics services they purchase are regular standard services. Majority of the interviewees said that the services are customized for their needs only. Moreover, three interviewees emphasized that the services are highly customized for their needs. However, the interviewees did not mention what type of customization is included in the services they purchase. Thus, some scepticism about these opinions is in place.

Nearly all the companies' representatives felt that their current logistics service providers are flexible for their needs. In addition, two interviewees particularly emphasized this feature as one of the most important criterion for their logistics service providers. However, also opposite opinions occurred: one respondent stated that flexibility of logistics service providers depends on services and situations. According to this interviewee, transportation services are typically quite flexible, but flexibility in warehousing is sometimes non-existent. In addition, this interviewee felt that flexibility is often limited to basic services. The interviewee commented that for additional logistics services, service providers do not take customers' wishes into account.

The interviewees were also asked how often they communicate with their logistics service

providers, and whether the services require special education e.g. mechanical engineering. Nearly all of the interviewees stated that they communicate with their logistics service providers on a daily basis. One of the interviewees commented that on the operational level, communication with service providers is essential. Every day this interviewee's company faces logistics problems that need to be solved immediately. Interestingly, one manufacturing company's representative said that they only communicate once a week with their logistics service provider. According to this interviewee, communication and collaboration with their service providers has been quite unproblematic. However, this was only one single opinion. The interviewees were unanimous that no special education was needed for execution of logistics services they purchase. In this context, however, a few interviewees mentioned that there is a shortage of skilful warehouse personnel at the moment in the Moscow region.

Based on the answers of the interviewees, the logistics services these companies purchase were placed on the service process matrix. The aim was to create a general view of how these companies are served at the moment. Figure 4-14 illustrates the positions of these services on the matrix.

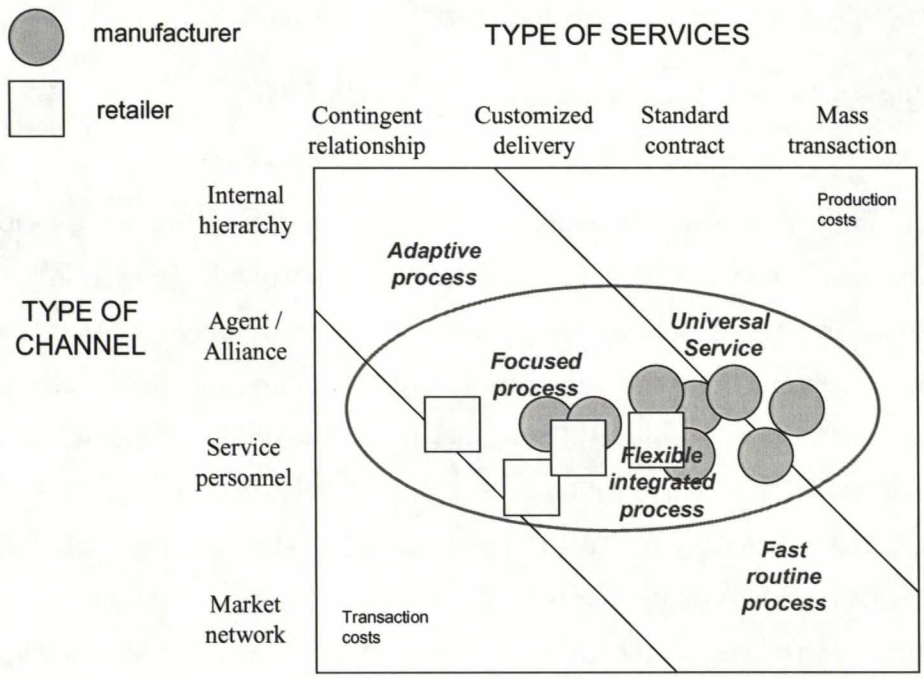

Figure 4-14 Logistics services on the service matrix

It became clear that the type of channel for most of these companies is very similar: it is somewhere between agent / alliance and service personnel. In other words, this channel includes the logistics service providers' service personnel that execute the services. According to Tinnilä and Vepsäläinen (1995, 64) this is a short channel based on personal interaction provided by one organization. The channel is longer if there are managers or supporting staff members involved in the process. As stated above, most of the companies have long-term contracts with their service providers.

If the answers according to the type of channel were quite similar, more variation could be seen in the answers related to the type of services. Based on the answers most services can be placed on the horizontal dimension of the matrix between contingent relationship and standard contracts. One of the reasons for this variation could be found in the relationships between these companies and their service providers. Intensive communication, long term contracts, shared problem solving and high degree of customization referred to contingent relationship between a service buyer and a service provider. On the other hand, some companies' representatives clearly felt that there was very little flexibility and simultaneously no custom solutions in their contracts. Moreover, these interviewees felt that their relationships with logistics service providers were somewhat distant.

4.5.2 The Problem of Universal Service

Based on the answers of the interviewees all the services are executed through the same channel. In other words, it appeared to be that the logistics services on the market face the problem of a universal service: all types of services are offered to service users with moderate close relationship. According to the answers of the interviewees, several types of services are offered the same way with same complexity. Even quite simple services require personal contact with the service provider. For example, several interviewees stated that they are in daily contact with their transportation service providers in order to solve operational problems of the service. In addition, most of the interviewees had no integration via IT-systems with their logistics service providers. This is a typical situation of a relatively young market: the service channels are not yet developed and all the services are pushed through the same channel.

In addition, when the interviewees were later given a list of value-added services, a few of them commented that these services are in their opinion rather basic logistics services that are automatically included into their service packages. This, once again, confirms that the type of channel, even for value-added services is the same as for other services. Even more interesting is that the space in the matrix where Tinnilä and Vepsäläinen (1995, 75 and Figure 2-8) place value-added services remains empty in the Figure 4-14.

4.6 Potential and Challenges of the Business Environment

The fifth element of the framework comprises the future possibilities and challenges of the service business environment (Figure 4-15).

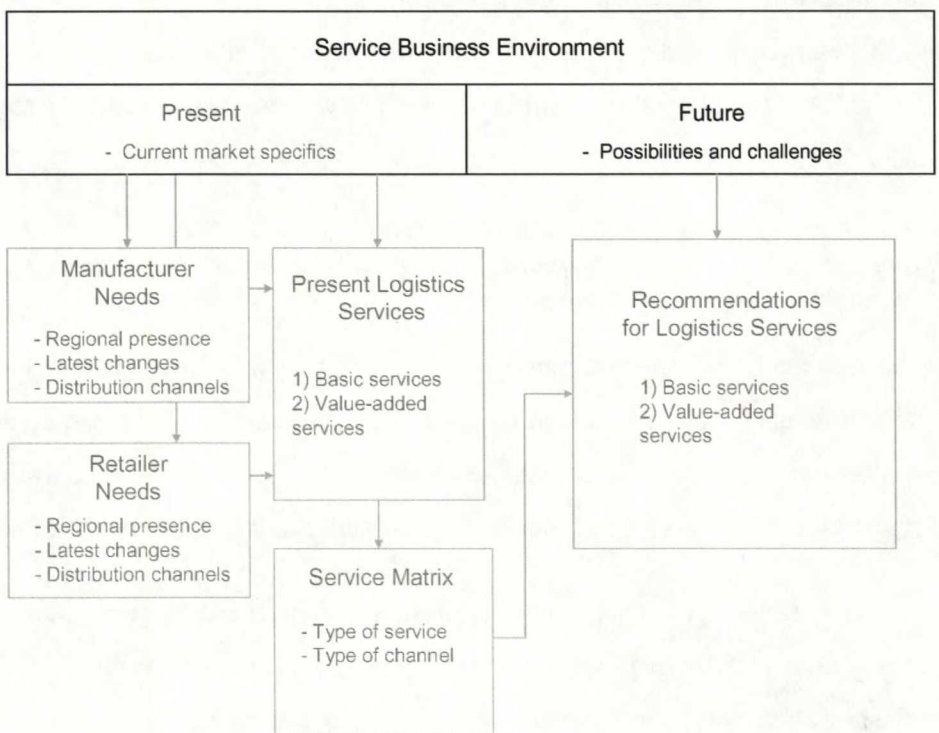

Figure 4-15 Future prospects of service business environment in the framework

Research revealed that there is demand for all logistics services at the moment in Russia. Moreover, the answers of the interviewees revealed that special need for logistics services in the future is in the regional locations in Russia, outside Moscow and St Petersburg metropolises. Future challenges of the market were among others underdevelopment of the

infrastructure and the lack of skilful workforce in logistics. Next, these research results regarding future possibilities and challenges of the service business environment are discussed in more detail.

4.6.1 *Possibilities of the Market*

The interviewees were asked their opinion about the future of the logistics service market in Russia. In addition, the respondents were asked if they believe that demand for logistics services will increase and for which services particularly. A general opinion appeared to be that there is need for all logistics services in Russia at the moment. Both warehousing and transportation services were mentioned by most of the interviewees.

According to the interviewees there is a huge demand for quality warehousing services, both in Moscow and St Petersburg, and especially in the other regions of Russia. Majority of the interviewees stressed that the biggest demand is for A-class warehouses. According to one of the interviewees:

> *"There are warehousing services available, that's not the issue. The problem is that these available warehouses do not qualify for even the basic requirements. The difference compared to Western warehouses is enormous."*

The interviewees believed that the amount of these small, low-quality warehouses will decrease and the warehouses will be replaced by more advanced, high quality warehouses. In addition, a few interviewees commented that they believe that big international warehouse operators will respond to this demand by entering the Russian market in the near future.

The interviewees also saw room for improvement in transportation services. One of the interviewees commented that there is need for two types of transportation services: firstly international transportation from Europe and secondly distribution services inside Russia. The interviewee emphasized that the secondary transportation will become more important in the future. Two of the interviewees also believed that big international companies will answer to this demand for transportation services. One of the retail representatives saw the problem of current transportation providers as follows:

> *"At the moment most companies, including Western international logistics service providers, subcontract distribution services from smaller, less reliable regional companies, and thus the service level is not ensured. There is a huge need for such*

logistics service providers that can provide reliable high quality transportation all over Russia."

The interviewees also believed that direct deliveries (not via Moscow) to regional locations will increase in the future.

A few comments were also given about the future of value-added logistics services. According to the interviewees, demand for value-added services will follow as soon as the basic services and infrastructures in Russia will be created. In addition, the interviewees commented that value-added services require a very close relationship and cooperation with the logistics service provider.

One of the interviewees commented that, in general only around 30 per cent of available logistics services on the market qualify for the needed service level. According to this interviewee, logistics services do exist in Russia, but there is often no guarantee of the quality of service. In other words, the biggest need is focused on high quality warehouses, reliable transportation and finding long-term reliable logistics partners. In addition, one of the retailer representatives commented that his company is definitely willing to pay a higher price for quality services.

4.6.2 Challenges of the Market

The interviewees were also asked to name possible challenges on the Russian market. The challenges stated by the most of the interviewees can be divided into two categories: 1) the challenges that are related to logistics and 2) the challenges caused by the business environment. Most of the problems related to logistics were related to the shortage of appropriate warehousing and the availability of reliable transportation. In addition, the interviewees commented that general underdevelopment of infrastructure in Russia causes daily challenges for efficient business. The poor condition of the roads, especially outside metropolises and traffic jams were mentioned by several interviewees. Moreover, one of the interviewees commented that customs formalities are still inconsistent and thus, delivery times are very difficult to estimate. Several interviewees also stated that the lack of skilful workforce in logistics, both transportation and warehousing services, is a big challenge for the market. In addition, one of the interviewees commented that the prices for quality

logistics services are quite high. According to this interviewee, at the moment it is cheaper to store the products in Finland, where high quality warehousing services are affordable compared to the prices in the Moscow region.

The challenges related to the business environment named by the interviewees were the following: grey market and cheap Asian replicas of the products, uncertainty of the business, unstable legal environment e.g. customs formalities, bureaucracy and tight competition on the electronics market. In addition, the interviewees were asked whether they believe that political decisions have an effect on the market. According to the answers of the interviewees politics have a relatively small direct effect, but there is still indirect influence on the business e.g. through legislation.

4.7 Recommendations

The last element of the framework is the recommendations for logistics services in the future (Figure 4-16). Recommendations are given for both basic and value-added logistics services.

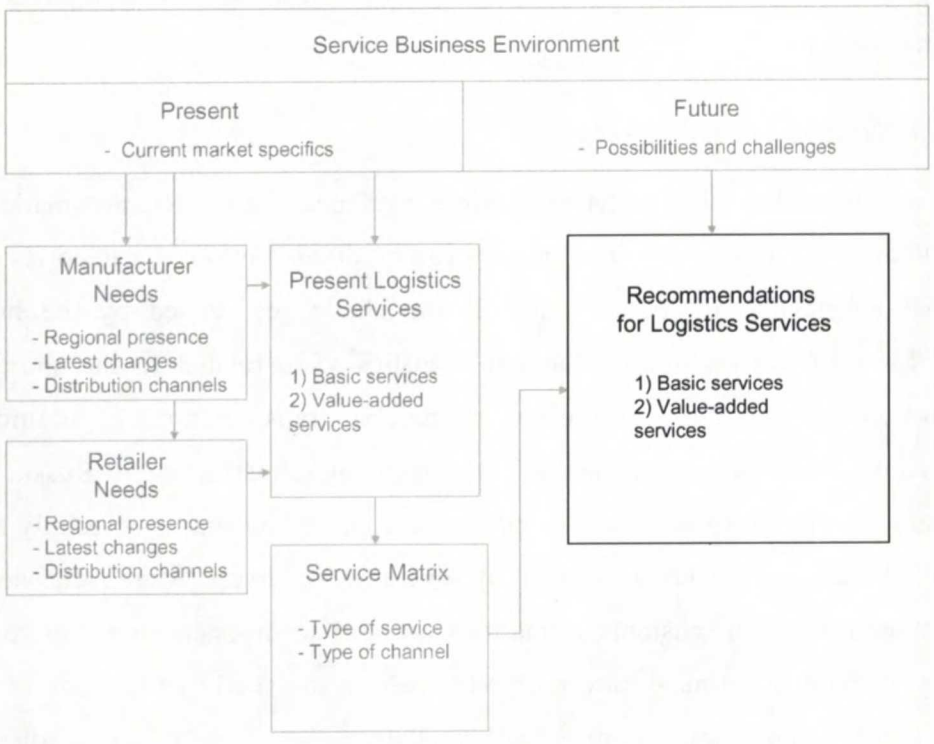

Figure 4-16 Recommendations for logistics services in the framework

A company entering an evolving market should take the business environment aspects into account. The Western Russian business environment has its own specialities which differ from "traditional" Western ways of business. This chapter aims to provide recommendations for Itella - how the company should develop further its logistics service offerings in Russia. These recommendations are also useful for any logistics company entering or operating on the Western Russian market, because different aspects of the market are taken into account. The emphasis is on basic and value-added logistics services.

4.7.1 Recommendations Based on Environment Data

Russia is a huge and a very tempting market for a logistics service provider. At the moment there is high demand for all logistics services, starting from traditional warehousing and transportation. The results of the interviews reveal that there are very big players with huge volumes on the Russian market. This means that in order to serve these customers and keep them, a logistics service provider must ensure that it has enough capacity and flexibility.

Traditionally many of the consumer good deliveries were transported to Russia via Finland. This mode still exists, and many Finnish warehouse service providers have been able to benefit from this transit traffic. However, the interviews exposed that in the future Finland's role as the Russian "central warehouse" will weaken. This intermediate warehousing will be replaced with direct deliveries to Russia. Most of the deliveries are at the moment, and also will be in the future first delivered to Moscow. Thus, there is an especially high demand for warehousing services in the capital. In addition, the demand for logistics services in other regions of Russia will increase. Therefore, a logistics service provider that aims to attain a competitive position on the market must be able to provide services in Moscow and across the country.

There is an enormous need for basic logistics services (warehousing and transportation) in Russia at the moment, and there are no notable signs of decreasing of this demand in the near future. It appears that outsourcing of logistics services is becoming more popular, especially for international companies. In addition, the term is not unfamiliar for Russian companies either: three quarters of the Russian interviewees commented that their companies outsource some logistics functions. In other words, there are tons of potential customers in Russia ready

to outsource their logistics function to a reliable logistics service provider. However, most of these customers are served by several warehouse and transportation service providers. In other words, a logistics service provider aiming to attract these customers should keep in mind the enormous size of the market. Many interviewees commented that they purchase logistics services from several sources because there is simply no one single logistics service provider that has enough capacity to provide all the services. Moreover, the Russian customers ask for reliable and high quality services. Thus, when subcontracting the services from local service providers the quality of a service must be ensured.

4.7.2 *Recommendations for Efficient Services*

Logistics services in Western Russia are at the moment all offered using the same service channel: even the basic and routine services are carried out through service personnel. This is time consuming and inefficient, but it is very typical for a new evolving market. The services offered by different logistics service providers do not differ, and thus service providers compete with very similar service packages. In this case, price has become the choice criterion for the customers. In order to differ from the competition, a logistics service provider has to offer efficient solutions.

A logistics service provider aiming to successfully enter the Russian logistics market should strive away from this single service channel of service personnel, and aim to offer the customers efficient services by matching the types of channels and the types of services. Figure 4-17 illustrates the potential for new service offerings and service channels. The interviews revealed that the utilization of information systems in ordering a logistics service is still quite uncommon in the Western Russian market. Providing the customers with effective IT-programmes that can easily be adapted into the customers' operations rationalize simple routine services towards market network -type of channel. Implementing proper IT-systems will shorten service times and help to decrease faults in service processes. In addition, it can reduce the costs for both, a service purchaser and a service provider. The services appropriate for this service channel are transportation and distribution services and basic warehousing operations.

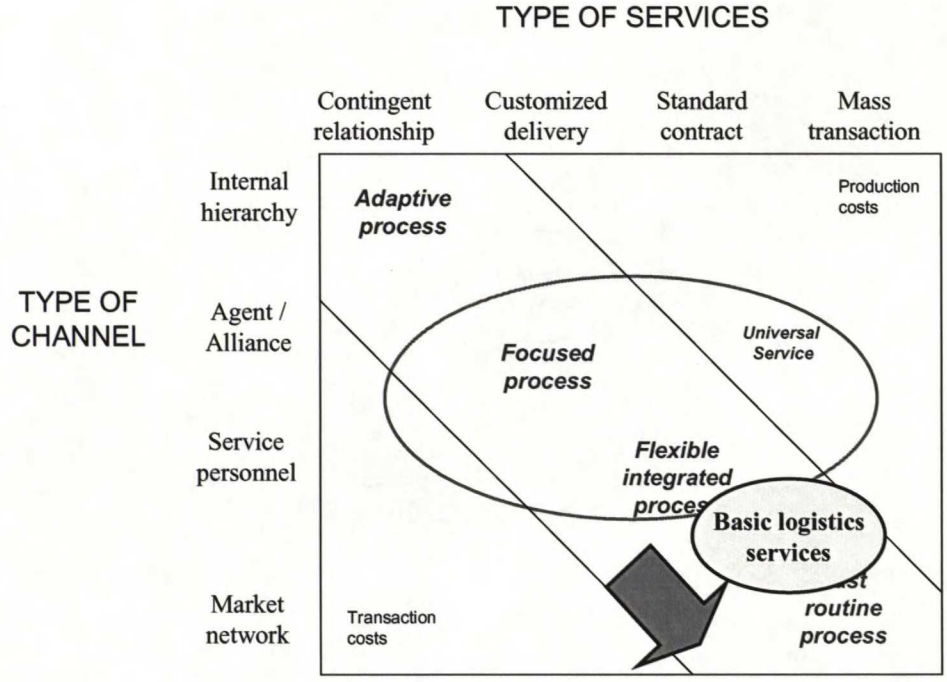

Figure 4-17 Recommendation for basic logistics services on the Russian market

On the other hand, a logistics services provider could develop the services towards customized adaptive processes that deal with complex logistics problems and are highly customized for customers' needs. However, this strategy requires confidential communication, flexible access to a customer's resource base and sometimes modifications of other service processes. Based on the interviews, Russian customers are not willing to share their companies' data with anyone who approaches the company: a strong and reliable relationship must first be created. In other words, a good starting point on the Russian logistics market is to establish strong customer relationships by offering effective routine services, and only then offer the customers more specialized and customized solutions. Value-added services fall into this more customized area of services.

The representatives of Russian companies are quite familiar with value-added logistics services, but the degree of purchasing of theses services is still quite low. Thus, there is a need for the services, but service channels need do be revised. Figure 4-18 illustrates how customized value-added services need to be replaced on the service matrix.

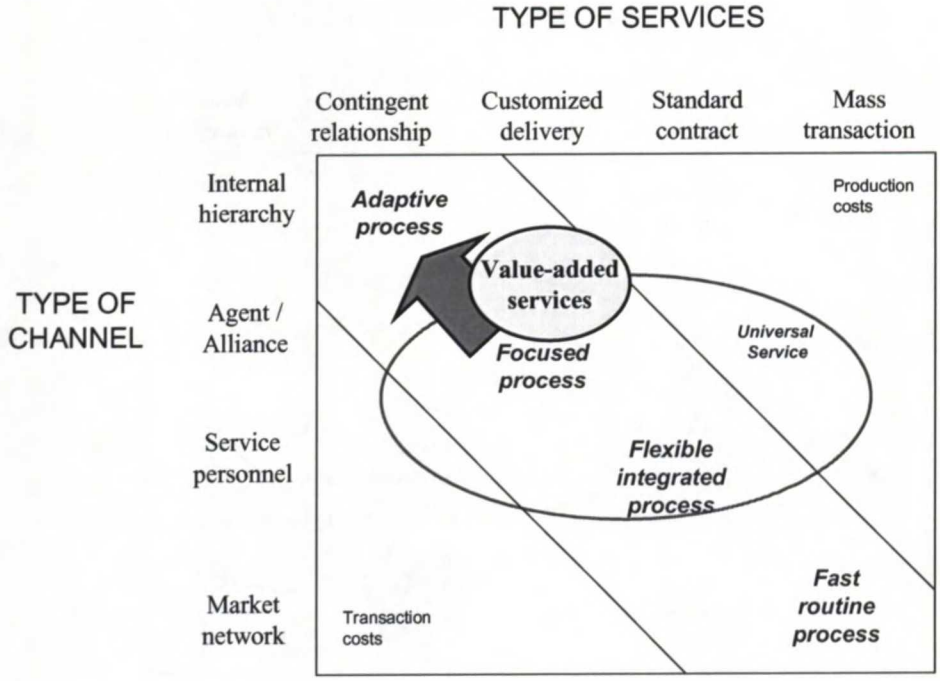

Figure 4-18 Recommendation for value-added services on the Russian market

The interviews revealed that a special need for value-added logistics services occurred for reverse logistics, packing services and formation of customer specific sales lots. Less wanted services were those that are highly integrated into customers' own processes. Especially high future potential is in reverse logistics: several interviewees commented that they plan to outsource reverse logistics of their companies in the near future.

According to the research, the best solutions for any logistics problems must developed with close cooperation between a customer and a logistics service provider. Same conclusions were obtained by Haapanen and Vepsäläinen (1999, 207-208). Thus, basic services must be executed first, and only then value-added solutions can be offered. A logistics service provider should also keep in mind that flexibility is a must in value-added services.

5 DISCUSSION AND CONCLUSIONS

The demand for logistics services in the Western Russia has increased over the past twenty years substantially: an increasing amount of companies outsource their logistics functions to logistics service providers and focus on core activities of businesses. Simultaneously globalization, increasing requirements of the customers and intensifying competition force the companies to enter new attractive business markets. Thus, the discovery of appropriate logistics offerings in order to meet customers' demands and knowledge of the target market becomes more important. It is actually especially important when the business environment of the new market area is an unstable evolving market.

This chapter discusses and summarizes the main empirical results and contributions of this study. In addition, suggestions for future research are given.

5.1 Summary

In the theoretical part of this thesis several frameworks for analysing logistics services were described. The phenomena of 3PL and outsourcing were discussed, and the benefits as well as the risks of outsourcing were explained. Moreover, logistics basic and value-added services were distinguished. In the third chapter the framework for analysing logistics service needs and factors influencing these needs was constructed and the operationalization of the framework into a research questionnaire used in the interviews was described. Moreover, this chapter illustrated how the data for empirical research was collected and analysed. The fourth chapter focused on the interpretation of the research results and recommendations based on the case study.

The most important finding of this study is that at the moment the logistics services on the Russian market face the problem of universal service: all logistics services are offered using the same service channel. Even the basic and routine services are carried out through service personnel. A logistics service provider aiming to enter the Russian logistics market should strive away from this single service channel of service personnel, and aim to offer the customers efficient services by matching the types of channels and the types of services. Efficient IT-solutions should be developed in order to rationalize the service channel for such operations as transportation and warehousing. On the other hand, the study revealed that

value-added services have to be planned in close cooperation with a service purchaser, and thus the delivery channel requires close collaboration. Moreover, logistics value-added services can be developed only after the basic services are established efficiently. The empirical research revealed that a special need for value-added logistics services in the future in Russia will be in reverse logistics, packing services and formation of customer specific sales lots.

Furthermore, the study revealed several possibilities and challenges of the Russian logistics market. Generally it occurred that there is a huge demand for basic logistics services, especially transportation and warehousing. In addition, a large amount of potential customers can be found outside Moscow and St Petersburg regions. In order to serve customers in Russia in the future, a logistics service provider must provide services also outside these two metropolises.

What is more, this study revealed that the utilization of transportation routes of products to Russia may change significantly in the near future: increasingly more products will be delivered directly to the market. This means that Finland's position as a transit-country may change substantially, if the need for intermediate warehousing in Finland will decrease. Moreover, an important challenge of the market is to notice that there is shortage of skilful blue-collar workforce for logistics services at the moment, and that might affect a logistics service provider's operations.

5.2 Contributions

This thesis addressed four main objectives. The first objective of this study was to create a framework for examining the service needs and factors influencing these needs in an evolving business environment. In addition, the aim was to test and apply the framework to the case study. Moreover, the third objective was to specify the possibilities and challenges that an emerging market involves from the logistics service provider's point of view. The purpose was to approach this objective by means of the framework. Finally, the aim was to track the basic and value-added logistics services that are appreciated by logistics service users in Russia. Thus, the research question asked was: how to define logistics service needs in the changing business environment in Western Russia?

After the illustration of different approaches to service strategies and the general overview of the important concepts of logistics services, a framework for analysing logistics service businesses was presented in the second chapter. Based on the literature review a framework for analysing logistics service needs was created. This framework combined previous service literature with the aspect of evolving business environment. Through this aspect the framework aimed to address the possibilities and challenges that the environment may involve from the logistics service provider point of view. Moreover, the framework utilized the service matrix (Haapanen and Vepsäläinen 1999, 124) in order to track specific basic and value-added logistics services that could be appreciated by logistics service users. In addition, the framework was tested and applied to the case study in evolving business environment of Western Russia.

The main contribution of this study is that it provides the framework for analysing logistics service needs, and takes the aspect of business environment into account in this framework. Especially on the evolving markets understanding of this dimension is very important. The other contribution addresses the findings from electronics manufacturers and retailers on the Russian market which were analysed with the framework created for this study. These findings provide interesting insight into Russian logistics service market and hopefully offer a new perspective to any logistics service providers that aim to enter the Russian market or already operate in Russia.

5.3 Future Research Topics

This study provides some directions and suggestions for future research. First of all, the framework of this thesis could be tested in other business markets in Russia or in other evolving environments.

The first issue to arise from the empirical research is that the logistics market in Russia could be investigated more exhaustively including the different parties involved in the production of the services. Hence, the viewpoints of current logistics service providers operating in Russia could be examined. Opinions of these companies could give a more detailed vision about the state of Russian logistics market. The second important issue for further examination could be to develop a cost analysis for value-added logistics services, and

investigate how much service purchasers are actually willing to pay for these services. Furthermore, it would be interesting to examine quantitatively different scenarios of these costs. Finally, placing single logistics services on the service matrix and investigating these services separately would be important in order to define efficient service offerings.

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Halme Mika, Supervisor Helsinki Supply Chain, Panasonic CIS, Helsinki, 2.11.2007.

Hurtta Semi, Warehouse Manager, Itella Group, Kotka, 31.1.2008.

Kostadinova Gera, Logistics Manager, a global computer manufacturing company XXX, Moscow, 3.12.2007.

Larinen Mika, Operative Manager, Itella Group, Vantaa, 26.9.2007.

Maarni Tomi, General Manager, Brightpoint, Moscow, 5.12.2007.

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Zinovyev Alexey, Manager for International Logistics, Scarlett, Moscow, 5.12.2007.

XXX, Administrative Director, a global document management technology and services enterprise, Moscow, 11.2.2008.

XXX, Purchasing Manager, a distributor of computer equipment and digital devices, Moscow, 13.2.2008.

THE INTERVIEW QUESTIONNAIRE (EN)

Itella
Warehouse Value-Added Services In Electronics Market in Russia

Final Questionnaire

The purpose of this research is to study the present situation of warehouse value-added services on Russian logistics market. Special attention is paid on electronics market.

Definitions:

Logistic value-added services:	**Logistic services that add value to a customer's process in warehouse operations, for example localization**
Russian market:	**Moscow and St. Petersburg area**
Electronics market:	**Manufacturers and distributors of electronic products**

This interview is divided into four main subjects:

1. **Business Environment - Russian electronics market**
2. **Electronic Products and Supply Chain**
3. **Logistic Service Providers**
4. **Value-added services**

Interview takes around 45-60 minutes. There are no right or wrong answers: Different opinions and views are highly appreciated.

1. Business Environment: Russian electronics market

1.1. How is the sales volume of your company divided in the Russian market?

____% of sales volume in Moscow

____% of sales volume in St. Petersburg

____% of sales volume elsewhere in Russia

(100 %)

1.2. Please describe what changes your company has been through in Russia over the past 3 years?

(e.g. growth, changes in customer preferences, product changes)

2. Products and Supply Chain

2.1 Please describe the typical flow of your products from a factory to the end customer.

(App. 2.1)

2.2 Please name the elements / players and their roles in this flow?

3. Logistic Service Providers

3.1 What logistic functions do you purchase as services and what do you perform yourself? (Appendix 3.1)

3.2 For those services you purchase – are they all purchased from a single company or from several logistic service providers?

3.3 Please describe the execution of logistic services (type of channel)

- **Where are the services executed? (in your facility / in service provider's facility)**
- **Is the service executed by own employees or personnel of logistic service provider?**
- **Are there other companies' products in the facility or is the facility for your company needs only?**
- **Do you share information with your logistic service providers using IT programs?**
- **How often do you communicate with the service provider?**

3.4 Please describe the service process (type of service)

- **Describe the type of your contract with logistic service provider (e.g. yearly contract / long term contract)**
- **Is the service customized / standardized?**
- **Is the service flexible for your needs? (e.g. when extra capacity is needed)**
- **Does the service require special skills (e.g. engineering)?**

3.5 In your opinion, what is the future of logistic service market in Russia? Will the demand in your company increase / decrease and for what type of services in particular?

4. Value-Added Services

4.1 Are you familiar with the concept logistic value-added services? Yes/No

4.2 Do you currently purchase logistic value-added services? Yes/No

4.3 Appendix 4.3 a-c

a) **Please indicate value-added services you are *familiar* with:**
b) **Please indicate value-added services you are *use at the moment*:**
c) **Please indicate value-added services you might need *in the future*:**
d) **What factors drive the future needs for the services indicated above?**

4.4 Are there some other value-added services that you think might be useful for your company?

4.5 Previously you mentioned that you purchase logistic value-added services. What was the reason for purchasing these services? What/who derive the need for these services?

4.6 Please name 2 factors from the following list influencing the need for logistic value-added services the most? Why? (Appendix 4.6)

5. Business Environment: Russian electronics market

5.1 How do you see the future of your company in Russia? What is the direction? (e.g. growth, changes in customer preferences, product changes)

5.2 What are possible challenges / problems of the market? How does politics affect the market development?

Other - General information

What is the title and responsibility of the interviewee?

Can the company and the interviewee be named in the thesis?

APPENDIX FOR THE INTERVIEW QUESTIONNAIRE (EN)

Itella
Warehouse Value-Added Services
In Electronics Market in Russia

Questionnaire Appendix

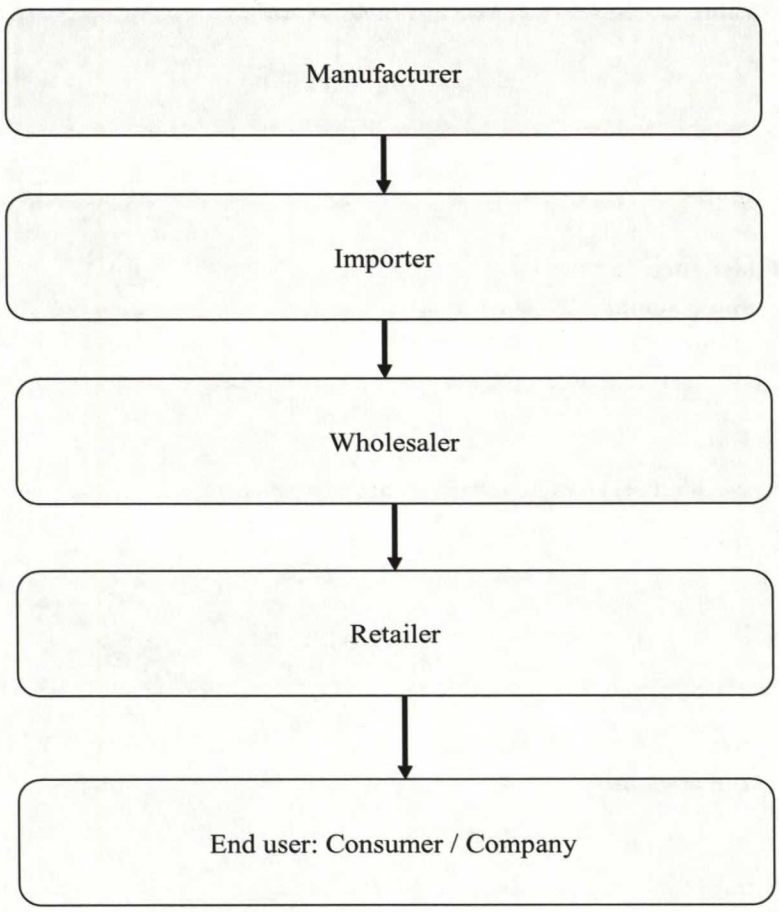
Company:

Date:

2. Products and Supply Chain

2.1 Please describe the supply chain from a factory to the end customer.

Supply Chain



3. Logistic Service Providers

3.1 What logistic functions do you purchase as services and what do you perform yourself?

	Buying	Self-made
• Transportation	☐	☐
• Warehousing	☐	☐
• Forwarding	☐	☐
• Customs	☐	☐
• Distribution	☐	☐

4. Value-Added Services

4.3 a) Please indicate value-added services you are *familiar with:*

	Familiar
Pricing	☐
Localizing	☐
Packing	☐
Formation of customer specific sales lots	☐
Program updating and assembly	☐
Track and trace	☐
Security	☐
Reverse logistics	☐

b) Please indicate value-added services you are *use at the moment*:

	Use
Pricing	☐
Localizing	☐
Packing	☐
Formation of customer specific sales lots	☐
Program updating and assembly	☐
Track and trace	☐
Security	☐
Reverse logistics	☐

c) Please indicate value-added services you might *need in the future*:

	Need in the future
Pricing	☐
Localizing	☐
Packing	☐
Formation of customer specific sales lots	☐
Program updating and assembly	☐
Track and trace	☐
Security	☐
Reverse logistics	☐

4.6 Please name 2 factors from the following list influencing the need for logistic value-added services the most? Why?

Environment – Russian market	☐
End customers	☐
Manufacturers	☐
Wholesalers	☐
Retailers	☐

THE INTERVIEW QUESTIONNAIRE (RU)

Ителла
"Дополнительные услуги логистики товаров электроники в России"

Заключительный вопросник

Цель этого исследования - получить информацию о состоянии дополнительных услуг логистики Российского рынка товаров электроники на сегодняшний день.

Определения:

Дополнительные услуги логистики:	**Услуги, которые добавляют ценность продукта например, упаковка товара на складе**
Российский рынок:	**Регионы Москвы и Санкт-Петербурга**
Рынок электроники :	**Производители и продавцы товаров электроники**

Темы для обсуждения:

1. **Российский рынок товаров электроники**
2. **Продукты электроники Вашей фирмы**
3. **Логистические услуги в России**
4. **Дополнительные услуги логистики**

На встречу уйдет максимум час. Все мнения будут очень ценны для моей работы.

1. Российский рынок электроники

1.1. Как, примерно, у Вашей фирмы разделяется объём торговли в России?

____ % в Москве

____% в Санкт Петербурге

____% в остальных частях России

(100 %)

1.2. Пожалуйста, расскажите об изменениях Вашей фирмы на Российском рынке (ассортимент товаров, увеличение объемов торговли, предпочтения покупателей) за последние три года.

2. Продукты электроники Вашей фирмы

2.1 Пожалуйста, опишите весь процесс прохождения Ваших товаров от завода производителя до покупателя (Приложение 2.1)

2.2 Пожалуйста, обозначите разные факторы и их роли в этом процессе.

3. Логистические услуги в России

3.1 Какие из перечисленных услуг логистики Вы осуществляете сами и какие покупаете у других фирм? (Приложение 3.1)

3.2 Услуги, которые Вы покупаете, предоставляет одна фирма или несколько разных фирм?

3.3 Пожалуйста, ответьте на следующие вопросы о выполнение сервиса Вашего поставщика логистических услуг:

- **Где физически выполняются услуги? (в Вашем помещение / в сооружении поставщика)**
- **Кто осуществляет услуги? (сотрудники Вашей фирмы/сотрудники поставщика)**
- **Занимается ли поставщик услугами также других фирм в этом сооружении?**
- **Есть ли у Вас объединенная компьютерная система с поставщиком услуг логистики?**
- **Как часто Вы поддерживаете связь с поставщиком? ежедневно, раз в неделю, раз в месяц, реже)**

3.4 Пожалуйста, ответьте на следующие вопросы о процессе/ типе сервиса Вашего поставщика логистических услуг:

- **Какой тип контракта у Вас с поставщиком? (годовой/постоянный)**
- **Ваш договор стандартный или разработан именно для Вас?**
- **Услуги "гибкие" для Ваших требований?**
- **Требуют ли услуги специального образования? (например, статус инженера-механика)**

3.5 Как Вы видите будущее логистичестих услуг в России? Прибавится ли спрос?

4. Дополнительные услуги логистики

4.1 Знакомы ли Вы с выражением «дополнительные услуги логистики»? Да/Нет
4.2 Покупает ли Ваша фирма сейчас эти услуги? Да/Нет

4.3 (Приложение 4.3 a-c)

a) **Пожалуйста, укажите те дополнительные услуги, *с которыми Вы знакомы:***
b) **Пожалуйста, укажите те дополнительные услуги, *которые Вы сейчас покупаете:***
c) **Пожалуйста, укажите те дополнительные услуги, которые, Вы думаете, *будут Вам нужны в будущем*:**
d) **По Вашему мнению, какие факторы больше всего влияют на будущий спрос этих услуг?**

4.4 Какие другие дополнительные услуги логистики, необходимые Вашей компании?

4.5 Какие из следующих факторов больше всего влияют на спрос дополнительных услуг логистики? Почему? (Приложение 4.5)

5. Российский рынок товаров электроники

5.1 Как Вы видите будущее Вашей компании на Российском рынке? Какие возможности?

5.2 Где Вы видите возможные проблемы рынка? Как Вы думаете, политические решения влияют будущее рынка электроники?

Другая информация

Ваша должность?

Можно ли название компании указать в дипломе?

APPENDIX FOR THE INTERVIEW QUESTIONNAIRE (RU)

Ителла
"Дополнительные услуги склада электроники в России"

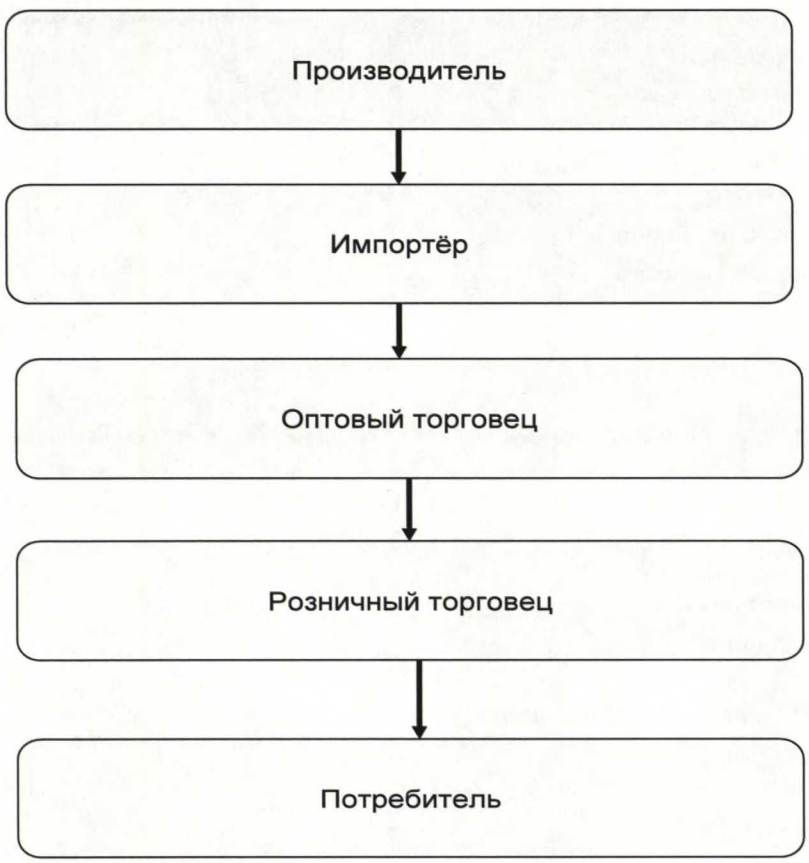
Приложение к вопроснику

Фирма:

Дата:

2. Продукты электроники Вашей фирмы

2.1 Пожалуйста, опишите весь процесс Ваших продуктов от завода производителя до покупателя



3. Логистические услуги в России

3.1 Какие из перечисленных услуг логистики Вы осуществляете сами и какие покупаете у других фирм? (Приложение 3.1)

	покупаете	сами
• Транспортные услуги	☐	☐
• Хранение	☐	☐
• Транспортно-экспедиторские услуги	☐	☐
• Декларирование товаров	☐	☐
• Дистрибуция	☐	☐

4. Дополнительные услуги логистики

4.3

a) Пожалуйста, укажите те дополнительные услуги, *с которыми Вы знакомы:*

	Знакомы
Нанесение цифрового кода	☐
Локализирование товара	☐
Упаковка	☐
Формирование специальных заказов для клиентов	☐
Собрание и установка приборов	☐
Отслеживание статуса доставки	☐
Охрана	☐
Обратная логистика	☐

b) Пожалуйста, укажите те дополнительные услуги, *которые Вы сейчас покупаете:*

	Покупаете сейчас
Нанесение цифрового кода	☐
Локализирование товара	☐
Упаковка	☐
Формирование специальных заказов для клиентов	☐
Собрание и установка приборов	☐
Отслеживание статуса доставки	☐
Охрана	☐
Обратная логистика	☐

а) Пожалуйста, укажите те дополнительние услуги, которые Вы думаете, *будут Вам нужны в будущем*:

	Будут нужны в будущем
Нанесение цифрового кода	☐
Локализирование товара	☐
Упаковка	☐
Формирование специальных заказов для клиентов	☐
Собрание и установка приборов	☐
Отслеживание статуса доставки	☐
Охрана	☐
Обратная логистика	☐

4.6 Какие из следующих факторов больше всего влияют на спрос дополнительных услуг логистики?

Почему?

Российский рынок	☐
Покупатели	☐
Производители	☐
Оптовые торговцы	☐
Розничные торговцы	☐